

244128

JPRS 83810

1 July 1983

DISTRIBUTION STATEMENT A

Approved for public release;
Distribution Unlimited

Worldwide Report

TELECOMMUNICATIONS POLICY,
RESEARCH AND DEVELOPMENT

No. 277

19910716149

REPRODUCED BY
NATIONAL TECHNICAL
INFORMATION SERVICE
U.S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA. 22161

FBIS

FOREIGN BROADCAST INFORMATION SERVICE

[DHC QUALITY CHECKED 3]

3
102
H60

NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semi-monthly by the National Technical Information Service, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

JPRS 83810

1 July 1983

Worldwide Report

TELECOMMUNICATIONS POLICY,
RESEARCH AND DEVELOPMENT

No. 277

FBIS

FOREIGN BROADCAST INFORMATION SERVICE

DTIC QUALITY INSPECTED 3

JPRS REPORTS

Japan Report
Korean Affairs Report
Southeast Asia Report
Mongolia Report

Near East/South Asia Report
Sub-Saharan Africa Report
West Europe Report
West Europe Report: Science and Technology
Latin America Report

USSR

Political and Sociological Affairs
Problems of the Far East
Science and Technology Policy
Sociological Studies
Translations from KOMMUNIST
USA: Economics, Politics, Ideology
World Economy and International Relations
Agriculture
Construction and Related Industries
Consumer Goods and Domestic Trade
Economic Affairs
Energy
Human Resources
International Economic Relations
Transportation

Physics and Mathematics
Space
Space Biology and Aerospace Medicine
Military Affairs
Chemistry
Cybernetics, Computers and Automation Technology
Earth Sciences
Electronics and Electrical Engineering
Engineering and Equipment
Machine Tools and Metal-Working Equipment
Life Sciences: Biomedical and Behavioral Sciences
Life Sciences: Effects of Nonionizing Electromagnetic
Radiation
Materials Science and Metallurgy
Meteorology and Hydrology

EASTERN EUROPE

Political, Sociological and Military Affairs
Scientific Affairs

Economic and Industrial Affairs

CHINA

Political, Sociological and Military Affairs
Economic Affairs
Science and Technology

RED FLAG
Agriculture
Plant and Installation Data

WORLDWIDE

Telecommunications Policy, Research and
Development
Nuclear Development and Proliferation

Environmental Quality
Epidemiology

FBIS DAILY REPORT

China
Soviet Union
South Asia
Asia and Pacific

Eastern Europe
Western Europe
Latin America
Middle East and Africa

To order, see inside front cover

1 July 1983

WORLDWIDE REPORT
TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT

No. 277

CONTENTS

ASIA

AUSTRALIA

Status, Future Role of AUSSAT, Telecom Assessed (THE COURIER-MAIL, 3 May 83; THE AGE, 27 Apr 83)	1
Description of AUSSAT by Don Petersen Proposals for Telecom by Peter Roberts	
Report Profiles Computer Vendors, Local Market Trends (Douglas Moore; THE AUSTRALIAN, 3 May 83)	4
Victoria Adopts Computerized Legal Information System (Garry Sturgess; THE AGE, 4 May 83)	6
New Telex Interface Component Offers Unique Features (THE AUSTRALIAN, 3 May 83)	7
Advantages of New Internet System Described (Cliff Patrick; THE AUSTRALIAN, 3 May 83)	8
Briefs ICL Net in AUSTPAC	9

PEOPLE'S REPUBLIC OF CHINA

China's Radio Broadcasting, Television Industries (ZHONGGUO JINGJI NIANJIAN, 1982)	10
Sichuan Holds Meeting on Radio, Television Work (Chengdu Provincial Service, 18 Jun 83)	15

Guangzhou Telecommunications Cable Project Accelerated (Zhou Shihao; XINHUA, 3 Jun 83)	16
Radio, TV Science, Technology Committee Set Up (Beijing Domestic Service, 5 Jun 83)	17
Briefs	
Fujian Telephone Exchange	18
Shenyang Direct-Dial Telephones	18
Shanxi Long-Distance Calls	18
Nei Monggol Television	18
Guandong Television Relay Station	18
LATIN AMERICA	
BARBADOS	
Phone Company Announces Upcoming Dialling Advances (BARBADOS ADVOCATE, 16 May 83)	19
BELIZE	
Briefs	
Government's TV Plans	20
BERMUDA	
Citing Government Obstruction, Company Scraps Plans for Pay TV (THE ROYAL GAZETTE, 10, 13 May 83)	21
Starvision Decision	
Attack on Government Policy	
Briefs	
Satellite Dish Policy	23
CUBA	
Briefs	
Chairman of OIRT	24
Radio Agreement With Romania	24
Approval of Radio Marti	24
GUYANA	
Briefs	
New GBC Transmitter	26
MEXICO	
Swedish L M Ericsson Firm Gets Injection of Capital (Bengt Albons; DAGENS NYHETER, 21 May 83)	27

ST LUCIA

- Cable TV System Set To Begin Local Operations Soon
(THE WEEKEND VOICE, 30 Apr 83) 31

TRINIDAD AND TOBAGO

- Briefs
Tobago Telephone Expansion 32

NEAR EAST/SOUTH ASIA

ALGERIA

- Telecommunications Projects Reported
(Cherif Haddad; EL MOUDJAHID, 13-14 May 83) 33

ISRAEL

- Trans-Samaria Cable Under Construction
(ITIM, 13 Jun 83) 35

LEBANON

- Briefs
Protocol With ROK 36

SRI LANKA

- All Districts To Have Direct Dialling By 1984
(Winston de Valliere; SUN, 18 May 83) 37

SUB-SAHARAN AFRICA

NIGER

- Results of Communications Minister's Tour of Interior
(Mohamed Madou, et al.; LE SAHEL, 16 May 83) 39
- Briefs
Diffa Department's Improved Communications 42

SEYCHELLES

- Telephone Service Improves; Demand Increases
(NATION, 20 May 83) 43

ZIMBABWE

- Work on Microwave Link Experiment Scheduled
(THE CHRONICLE, 13 May 83) 45

USSR

Communicators' Contribution To Food Program (V.N. Lebedev; VESTNIK SVYAZI, Jan 83)	46
Moscow Describes Phototelegraphy of Central Press (Moscow Maritime Service, 7 May 83)	49
Briefs	
Kemerovo Paper Facsimile Station	50
Tajik Radio Relay Line	50

WEST EUROPE

EUROPEAN AFFAIRS

European Meteorological Satellite Program (AFP SCIENCES, 24 Mar 83)	51
Briefs	
ESA 'Navsat' Study	53
France, UK on Telecom-1	53

AUSTRIA

Expansion of Cable TV Requires Huge Investments (Franz C. Bauer; DIE PRESSE, 13 May 83)	54
--	----

CYPRUS

Nonaligned News Agencies Meeting (Nicosia Domestic Service, 1 Jun 83)	56
--	----

DENMARK

Country's First Local Radio Station Inaugurated (Jens Thomsen; BERLINGSKE TIDENDE, 1 May 83)	57
Text Television To Start for Hearing Impaired (BERLINGSKE TIDENDE, 17 May 83)	58

FRANCE

Political, Technical Decisions at ITU Conference in Nairobi (Michel Toutan, Jean-Louis Blanc; TELECOMMUNICATIONS, Jan 83)	59
CGE Chief Worried About Domestic, World Industrial Alliances (Jacques Jublin; LES ECHOS, 26 May 83)	63
Thomson Goal: 30-40 Percent of Telecommunications Market (Eric Sorlet; ZERO UN INFORMATIQUE HYBDO, 28 Feb 83)	66

Telephone Equipment, Components Cause Large Thomson-CSF Deficit (LES ECHOS, 4 May 83)	69
Thomson, Philips Seek Alliance To Produce TV Tubes (LES ECHOS, 6 May 83)	71
Thomson's MT 25 Installed in Chile; More Exports to Iraq, Zaire (D. Levy; ELECTRONIQUE ACTUALITES, 6 May 83)	73
Data Processing Consulting Firms Invest in Latin America (Daniel Solano; L'USINE NOUVELLE, 28 Apr 83)	76
Briefs	
MT-20 in Colombia	80
E 10 B, MT-20 in Jordan	80
TRT Contracts in Africa	80
Possible Alcatel Contract With China	81
LTT Contracts With Cameroon, Mexico	81
SAT Cables for Algeria	81
CGE Seeks Foreign Partner	81
Thomson Earth Station in Peru	81
TRT Contract in Morocco	81

NORWAY

Bank First To Connect Spitsbergen, Mainland Via Satellite (Lars Ditlev Hansen; AFTENPOSTEN, 31 May 83)	83
---	----

SWEDEN

Recent History, Strategy of Ericsson Information Systems (Eric Lundberg; ZERO UN INFORMATIQUE HEBDO, 7 Mar 83).....	85
Almost All Political Parties Back Satellite, Cable TV (Leif Dahlgren; SVENSKA DAGBLADET, 24 May 83)	89
State Television Company Directors Favor Third Channel (Thomas Jonasson; SVENSKA DAGBLADET, 24 May 83)	93
Briefs	
New Phone, Data Communications Link	94

STATUS, FUTURE ROLE OF AUSSAT, TELECOM ASSESSED

Description of AUSSAT

Brisbane THE COURIER-MAIL in English 3 May 83 p 4

[Article by Don Petersen]

[Text]

Is Australia's embryo domestic communications satellite system (AUSSAT) destined to become a test-tube baby?

Will Telecom, which has always insisted that it does things better on the ground than in the air, be a willing surrogate mother?

Could the nation's outback telephone subscribers, major broadcasters and data-dependent industries care less so long as image's and information flow freely?

These are questions which beg an answer while the new Labor government ponders what to do about AUSSAT, which is a very expensive foetus indeed.

Costing an estimated \$425 million, the AUSSAT system was conceived in 1977 at the urging of commercial television networks with the willing co-operation of the Fraser government.

By 1981 it had become a legitimate concept, comprising two satellites in static orbit over Australia and a network of 10 major city and 65 minor earth transmitting and receiving stations.

* * *

In the general, well-publicised enthusiasm, the satellites — to be launched by space shuttle in 1985 —

were to bring Australians closer together, city man with country cousin.

They would provide, in conjunction with Telecom ground facilities, telephone services to the remotest outback station — not to mention ABC radio and television programs, the School-of-the-Air and emergency communications in the event of natural disasters.

Less well publicised, although by no means concealed, was the desire of private enterprise organisations to help fund and be accommodated by the power of the satellites to beam information instantly to any part of the nation.

Australia's three major television networks — 7, 9 and 10 — saw the satellites as a means of broadcasting their programs nationally, like the ABC.

Banks, insurance companies, data processors, newspaper groups and so on sought space and an equity in the space-age system's marvellous facility for handling the transmission of information vital to their competitive operations.

AUSSAT Pty Ltd was formed in 1981 with the Federal Government holding 51 percent of equity and the private sector, mostly drawn from potential users, entitled to 49 percent.

The company contracted with Hughes Communications International specifications designed for Australia's needs.

It also arranged launching space on US space shuttles due to be hurled into orbit in mid and late 1985.

And planning began for a network of earth stations which, linked to potential users as diverse as an isolated farmhouse or a business house databank, would be connected instantly to the satellites.

But, as is made clear in "The Phone Book," a just-published book on Telecom by journalists Ian Reinecke and Julianne Schultz, the still flightless satellites were already embroiled in a bitter political and corporate struggle.

The controversy about who should own or operate them was only part of it. Telecom — and particularly its unions — were by 1977 deeply suspicious that AUSSAT would be used to break the government monopoly on the giant communications industry.

Some of these fears were well-founded. Sections of free enterprise were keen to gain a foothold in Telecom's lucrative, trunk route business without the obligation simultaneously to provide non-profitable services to outback communities.

And approaches were made to AUSSAT to gain just such a foothold which would lead, inevitably, to a competitive role with Telecom. There was and still is a strong feeling in the business community that the government monopoly could do with a bit of competition.

But Telecom scientists and engineers were also the full bottle on satellites, having conducted or studied some 31 major reports on them since 1972. And by 1977 Telecom reported after one more inquiry that:

"It is not possible at this time to establish a quantitative economic case to justify the provision of a national satellite system . . ."

Telecom was pressing ahead, at the cost of many millions of dollars, with high technology land communications which rapidly were reaching all disadvantaged Australians, the people said to be the prime beneficiaries of a satellite system.

The government's own Finance Department concurred, suggesting bluntly that the AUSSAT proponents had their sums wrong. The Defence Department, another potential user, pulled out.

None of this impressed successive Communications ministers — five in five years — who continued to wax lyrical about a project wickedly described in "The Phone Book" as a "Trojan Bird."

But a resurgent Australian Labor Party was looming in the background like some great, grey Star Wars menace.

And AUSSAT's worst fears were realised last December when Senator John Button, the architect of an eventual Labor victory, outlined the changes a Labor government would make.

The private sector, if it was still interested, would remain a minority shareholder in AUSSAT, he said. "It is simply a sound principle of common carrier communications systems that they should be controlled by government."

Also, a proper relationship had not been established between a highly expensive satellite system and the existing terrestrial system, in which there already was an investment of hundreds of millions of taxpayer dollars.

They both provided the same service, Senator Button said, implying they should be co-ordinated beneath a single authority. Telecom?

Moreover, Labor would not countenance the use by commercial television networks of the satellites' high-powered transponders "in the way they desire."

The transmission of network programs to the whole nation would adversely affect local creativity and di-

versity of regional broadcasting, Senator Button said.

States' rights were a curious position for a Labor politician to take, but the regional licence-holders, worried about being blanketed by the giants, loved it.

* * *

Currently, according to Senator Button's closest advisers, the future of AUSSAT is at sub-Cabinet level.

A government decision on final ownership, control and operations would not be made for several months. But there was no reason to suspect the outcome would differ in any substantial way from the Senator's scenario.

Telecom would like the whole thing to go away but, with something like \$42 million spent already on the satellite system, termination of pregnancy is not likely.

Big Business in Australia, which had sought at the very least entrepreneurial equity in AUSSAT, by now will have steeled itself to diminished parenthood.

What's more, it will have to live — for some years at least — with a grossly enlarged and so much more powerful government monopoly.

Proposals for Telecom

Melbourne THE AGE in English 27 Apr 83 p 6

[Article by Peter Roberts]

[Text] Telecom Australia should be greatly expanded and used to stimulate a new high technology communications industry, according to a book to be published today.

The authors of 'The Phone Book' argue that rather than hiving off sections of Telecom to the private sector, it should actually expand by absorbing the Overseas Telecommunications Corporation and Aussat, the domestic satellite authority. [as published]

Mr Ian Reinecke, a journalist and industry authority, and Ms Julianne Schultz, a journalism lecturer, say an expanded Telecom could foster new jobs and new skills in the local communications industry.

"Telecom over the past 10 years has produced perhaps a dozen really significant breakthroughs in the technology of communications," Mr Reinecke said yesterday. "But the manufacturing opportunities have gone begging."

He said nations such as Canada had used their communications authorities as a springboard for developing high technologies. Canada was now a significant force in the field of communications satellites. Australia, by contrast, had missed out on high technology manufacturing except in areas dependent on Telecom and the Department of Defence.

"Much of what constitutes local manufacture here is assembly or fabrication of designs developed overseas. This means that Australia has virtually no exports. There has been very little researched here or developed here."

The two authors strongly attack the Davidson inquiry into communications which advocated letting private firms compete with Telecom. They argue that the inevitable syphoning off of Telecom revenue from the profitable areas which business would choose to attack would lead to increased charges for consumers, especially in rural areas.

/'The Phone Book', by Ian Reinecke and Julianne Schultz. Penguin; \$6.95./
[in italics]

CSO: 5500/7571

REPORT PROFILES COMPUTER VENDORS, LOCAL MARKET TRENDS

Canberra THE AUSTRALIAN in English 3 May 83 p 23

[Article by Douglas Moore]

[Text] AUSTRALIA'S computer marketplace is small, yet fiercely competitive according to a report just published by the Yankee Group.

The report, "Japan in the Australian EDP, Communications and Office Automation Market", looks at all the main trends in the local computer marketplace and gives profiles on all 70 vendors who are active in this country.

According to the report, 2000 mainframe computers have been installed in Australia together with 12,000 minicomputers and over 25,000 personal computers.

Of these personal computers, about one third have been bought by businesses and the rest are used for home, educational and scientific applications.

"Vendors and users in Australia have to cope with a shortage of skilled computer personnel," the report notes.

"Australian Government austerity measures do little to alleviate this situation."

The Yankee Group says Japanese companies often use Australia as a test market for high technology products before releasing them elsewhere. This is because Japan sees Australia as a microcosm of the United States market.

Inroads

Of the major vendors, IBM, DEC, Facom, Wang and Prime are increasing their local market share, according to the report.

Burroughs, NCR, ICL and HP are stable, while Control Data, Honeywell and Univac (now Sperry) are losing their share of the market.

These companies are American, except for Facom, which is Japanese, and ICL, which is British.

The report says IBM's installed base of business machines is over 50 per cent of the local market and its \$1000 million base value is one third of the total.

Nonetheless, IBM Australia's 36 per cent EDP market share is the lowest of any IBM subsidiary world-wide.

IBM plug-compatible manufacturers (PCMs) are making inroads into the local market, and these PCMs are led by Japanese companies.

Facom (a combination of Fujitsu and Amdahl) in particular, and Natsemi (with Hitachi gear) to a lesser extent, are responsible, with a 1981 market share of 7.8 per cent, the report says.

Owing to demographic and geographic factors, Australian users are demanding hefty minicomputer power for distributed data processing and it is in this field that the low-end mainframe market is being squeezed out by 32-bit superminis, according to the Yankee Group.

The group believes superminis will become the pivot for office automation, but points out the Japanese are lacking in this area.

Personal computers are likely to become powerful, intelligent work stations.

In the supermini market, DEC now has a 60 per cent share, but this is expected to drop to 52 per cent by 1985, the report says.

Data General's share will drop from 10 per cent to 8 per cent, Prime's will increase from 10 per cent to 11.5 per cent, Perkin-Elmer's will fall from 9.5 per cent to

6 per cent and Wang's will grow from 8.5 to 20 per cent.

Japanese minicomputer penetration in Western markets is hampered by lack of software. But personal computers are expected to form an important component in Japanese office automation strategy.

In 1985 the personal computer market leaders will be IBM and DEC followed by Tandy, Apple and Wang, according to the report.

"There will be at least a 40 per cent increase in new office automation sales during the next 12 months, particularly from the traditional DP vendors as they release their products."

But the rate of increase will then fall off as the market for basic office automation products, especially word processing products, reaches saturation point.

The report says Wang now has a 25 per cent share of the integrated office automation systems market, but this will fall to 22 per cent by 1985.

IBM now has a 20 per cent share, which will rise to 26 per cent by 1985.

"At this stage the Japanese have not made serious incursions on the word processing side of the office automation market."

In the communications field the Davidson Inquiry recommended deregulation of Telecom and if this is adopted the market will be open to new competition, Yankee Group points out.

Many newcomers are poised to enter the Australian telecommunications market, including AT&T.

Telecom's packet switching and public digital data networks are too little, too late, the report says.

"Australian businesses have already found ways to reduce dependence on Telecom. IBM's SNA provided a cost-effective, distance independent, alternative communications facility for Australian business."

Despite denials, the Yankee Group expects a Facom/ICL partnership in Australia by the end of 1983.

ICL is expected to be the "senior" partner owing to its long-term involvement in Australia.

The mainframe market will reach saturation point by 1985

and the Yankee Group expects to see only two effective survivors in the mainframe market after 1985 — IBM and Facom/ICL.

The report says Australian-owned computer companies must export to survive.

Problems

They must offer "solutions" rather than hardware and software components alone.

Local companies face tremendous problems: for example, fierce competition, sales tax on software, lack of funding and the fact that "national pride in Australian technology has been actively discouraged".

"While international vendors in Australia cater to general requirements, Australian computer manufacturers need to focus on specific Australian needs, which they are doing now only to a limited degree.

"When Hartley Computer moved to manufacture of hardware, and general purpose software, it lost focus.

"The company could not compete with larger US and European suppliers."

Large-scale technology manufacturing in Australia is severely limited, it notes.

The report costs \$1495.

CSO: 5500/7571

VICTORIA ADOPTS COMPUTERIZED LEGAL INFORMATION SYSTEM

Melbourne THE AGE in English 4 May 83 p 4

[Article by Garry Sturgess]

[Text]

A computerised legal information service to cost \$6 million will be operating in Victoria in 15 months.

The first step to establish the service was taken yesterday when the State Government signed an agreement with a computer company allowing it to use legal materials owned by the State.

The agreement covers the use of State legislative material and the legal decisions of State judges.

The Premier, Mr Cain, said yesterday that the new system would be important for all users of legal services.

"Through this system, users will have fast access to legal information. This will mean quicker legal service for the public and a more cost efficient system for users," Mr Cain said.

Lawyers with a computer terminal and telephone will be able to use the service from their offices. The service will also be available through adapted television sets in the home and through public access terminals at university and regional libraries.

The State Government agreement was signed with Computer Power to develop and supply the new service.

The managing director of the company, Mr Roger Allen, said that the system "will bring vast up-to-date libraries of legal information from all Australian States, the Commonwealth and overseas into the offices of all legal practitioners, small or large, whether in the country or the city, at an affordable cost."

17

Mr Cain said that the copyright agreement signed with the company in no way affected the right of newspapers to report court proceedings. The system was aimed entirely at providing a faster information access system for lawyers and the public generally, he said.

Computer Power hopes to sign a similar copyright agreement with the New South Wales Government and the Federal Government.

The development of a computerised legal information service in Australia has been under discussion in Australia for more than five years.

CSO: 5500/7571

NEW TELEX INTERFACE COMPONENT OFFERS UNIQUE FEATURES

Canberra THE AUSTRALIAN in English 3 May 83 p 25

[Text] J.N. ALMGREN Pty Ltd has released a new product for the electronic office, a new telex interface called Telexmate model AS700, priced from \$6000.

Telexmate has been developed to cater for the vast market of word processing and data processing systems with asynchronous Ascii (TTY) communications.

The WP/DP system is connected to the telex line by the interface via the system's communications facility and converts the system code to the telex code for transmission to the network.

The WP/DP work station then acts as a telex terminal with the full power of word processing to create, edit and format messages for transmission.

A spokesman for Almgren said Telexmate completely replaced the old mechanical telex keyboard and paper tape "and the telex system runs as an independent process in parallel with other system functions, endowing the system with a dual role".

To send a telex an operator needed only to create a word processing document, add the destination and transfer it to Telexmate.

The system automatically picked up the document, validated it and transmitted it through the world-wide telex network.

Frequently used telex numbers together with their answerbacks could be stored in a directory, each entry having its own short code for recall as abbreviated dialling.

Standard formats and texts could be called up and edited

for individual transmission or simply inserted into new messages being prepared.

Automatic date, time of transmission and sequence number could be generated by Telexmate.

There was no waiting to use the telex, he said.

"Any number of work stations can be connected to the system and Telexmate is able to store telex messages and maintain its own transmit queue.

"After transferring the message to Telexmate, the operator is free to create another telex or perform some other task."

Telexmate automatically dialled the number, checked the answerback and transmitted the message.

Sequentially

"If the call is unsuccessful, ie the network is busy, or the subscriber occupied, Telexmate automatically redials the number.

"Incoming calls are received, stored or printed at the same time as an outgoing call is scheduled."

Each message was handled sequentially by the system, but should the operator wish to transmit an urgent telex, there was a facility to "jump" the queue and place a message at the head of the transmit queue.

Messages could be prepared and stored for later transmission to avoid the peak hour bottleneck between 4pm and 6pm or to take advantage of the offpeak transmission rates within Australia (after 6pm).

To ensure the legal implications of the telex document

were retained, the telex machine acted as a printer for Telexmate, producing a copy of the message together with details of addressee, originator, operator, time of queuing, the success or failure of the call and call duration.

Alternatively a printer could be attached to Telexmate to provide this facility.

Additional features included the ability to determine the status of messages in Telexmate, to delete a message from the transmit queue and to suppress the printout to provide for confidential messages.

The main cost saving using Telexmate was due to the fact that there was less reliance on a special operator.

"Operators' time is saved as the message is only typed once, at triple the speed because of the editing and formatting advantages."

And the ability to send messages from the same terminal as that on which they had been created had obvious advantages, he said.

"Once prepared and edited a message can be despatched directly to its destination avoiding delays in the internal routing of a message to the telex department."

He said it was evident that a convergence was taking place between routine office functions on the one hand and the techniques of text communication on the other.

To date, Telexmate had been successfully interfaced with Olivetti, IBM Displaywriter, Lanier and Philips word processors, and Wicat computer systems.

ADVANTAGES OF NEW INTERNET SYSTEM DESCRIBED

Canberra THE AUSTRALIAN in English 3 May 83 p 23

[Article by Cliff Patrick, general manager of Daro Office Systems Pty Ltd]

[Excerpt]

With the demand for speedy information has grown an increasing awareness that neither completely centralised, nor fully distributed processing systems fulfil all the needs of a business's operational departments.

These apparently conflicting requirements have meant an inadequate compromise or, at best, installation of further equipment with the inherent problems of extra cost and increased training requirements.

Now, large organisations can enjoy the best of both worlds: the flexibility of networking and the centralised number crunching of the mainframe.

Daro's new Internet system enables users of a wide range of mainframes — including IBM and Univac — to utilise the Hinet computer system to solve the conflict.

Communications

Internet provides powerful local processing while permitting access to centralised information held on a mainframe through interactive remote job entry and off-line communications.

Communications between the local Hinet network and the mainframe can be achieved in any of three ways: interactive, remote job entry, and off-line via diskette.

Hence the appropriate method of communications can be chosen depending on the application requirements.

Because Internet systems are based on CP/M (the world's most widely used operating system

with over 300,000 users), the choice of applications packages is almost limitless.

Previously, physically different pieces of hardware have been required for local processing and for mainframe communications.

With the new system, Daro is offering the functions of remote job entry, interactive mainframe communications, and word processing — all using the one system.

Users with local processing requirements can automate entire offices with a Hinet local area network (electronic mail, word processing, financial modelling, accounting etc), and also have direct line interactive access to the company mainframe from any of up to 30 Hinet user stations.

The end result is a huge cost saving through reduction of communication line costs, reduced load on the mainframe, inexpensive software, and low cost terminals and peripherals — elimination of duplicated equipment.

Almost any visual display terminal can be attached to the system.

This enables specialised equipment to be obtained for graphics, word processing or whatever, yet still allows the total communication with the mainframe host.

Similarly, virtually any printer can be incorporated.

The latest enhancement to Internet is a communications capability that supports the Univac Uniscope protocol.

This allows any number of Daro Hinet users to talk interactively with the Univac equipment emulating a U200 terminal.

PEOPLE'S REPUBLIC OF CHINA

CHINA'S RADIO BROADCASTING, TELEVISION INDUSTRIES

Beijing ZHONGGUO JINGJI NIANJIAN [ALMANAC OF CHINA'S ECONOMY (1982)] in Chinese, p V173-174

[Article by the Investigation and Research Office of the General Bureau of Telecommunications, Broadcasting and Television Industries: "China's Broadcasting and Television Industries"]

[Text] China's broadcasting and television industries gradually developed on a very weak foundation after national liberation. During the 28 years from 1949 to 1976, the nation manufactured a cumulative total of more than 50 million radios and 2,504 broadcast transmitters (43,054 kilowatts). During the 19 years from 1958 to 1976, the nation manufactured a cumulative total of more than 600,000 television sets and 228 television transmitters (583 kilowatts). Besides providing equipment for the construction of the domestic broadcasting and television networks and for use by the people, a small number were provided as foreign aid and exported. A large number of scientific and technical personnel, managerial cadres and technicians were trained in the process of developing and manufacturing the above products. A certain experience has been accumulated and a fairly good foundation has been established for further development.

After the Third Plenum of the 11th Party Congress, the party's Central Committee, the State Council and the concerned departments of the state all paid a great deal of attention and care to the development of our nation's broadcasting and television industries. Forceful measures were carried out in many aspects. In 1979, the National Bureau of the Broadcasting and Television Industries was founded. Investments and material supplies for construction were guaranteed and given support as priorities in state plans and in distribution. The distribution of raw materials increased by multiples. During the past 3 years (1979-1981), our nation's broadcasting and television industries have developed rapidly during readjustment.

(I) Production Developed Rapidly, Output Increased by Multiples Year After Year. During the 3 years, the output of television sets by the electronics industry increased gradually from 1.32 million units to 2,480 million units and 5.11 million units (including 1.37 million units assembled from imported parts), respectively registering annual increases of 155 percent, 88 percent and 106 percent. The output during these 3 years was 6.2 times the total

output of the past 21 years up to 1978. The output of tape recorders increased yearly from 160,000 units to 820,000 units and 1.26 million units, registering annual increases of 240 percent, 412 percent and 53 percent respectively. The output during these 3 years equalled 5.9 times the total output of the previous 22 years. The output of radios increased yearly from 13.88 million units to 24.71 million units and 36.83 million units, registering annual increases of 18 percent, 78 percent and 49 percent respectively. The output during these 3 years surpassed the total of the previous 30 years. (If we add the 1981 output of the sectors other than that of the electronics industry together, then in 1981, the entire nation produced a total of 40.57 million radios and 5.39 million television sets). The output of record players increased yearly from 450,000 units to 940,000 units and 750,000 units, an annual increase of 420 percent, 209 percent and 79 percent [sic] respectively. The output during these 3 years was more than quadruple the total of the previous 24 years. During these 3 years, 226 television transmitters with 1,342 kilowatts of power were manufactured, constituting 76.6 percent of the total number (295 units) over the past dozen years and 160 percent of the total power (839 kilowatts) over the same period. During these 3 years, 5,890 units of differential frequency television relays were manufactured, constituting 2.8 times the total number manufactured during the previous 7 years. During these 3 years, a total of 2,777 sets of various types of applied television apparatus were manufactured, equivalent to the total number manufactured during the past 20 years or so. During these 3 years, a total of 2.47 million cathode ray tubes was manufactured, equivalent to 1.5 times the total output of the past nearly 20 years. Visible increases were also realized in the output of other accessory and spare parts and equipment for television centers. The output of ordinary broadcasting and transmitting equipment and loudspeakers decreased because of the shortage of state investment for capital construction and the control of group purchasing power.

(II) The Quality of Products Visibly Improved Year by Year, Now the Quality of Most Products Is Stable. When the Bureau of Broadcasting and Television Industries was founded in 1979, reorganization and improvement of product quality was placed in the foremost position. Through research and analysis of quality, maintenance service was strengthened, quality information feedback and criteria for inspection were established, product design was improved, technical efforts to overcome difficulties were organized, various types of inspection and testing systems were made sound, overall quality management was popularized, and many activities to exchange experience, competitions among factories and quality evaluation and comparisons were organized. With the joint efforts of components plants and whole unit manufacturing plants, the quality of products visibly improved every year. Take the largest output of 12-inch black and white television sets as an example, in 1978, the average number of trouble-free operating hours was 500 hours. In 1979, the number of trouble-free operating hours of component systems throughout the nation averaged over 760 hours. In 1980, this reached over 1,500 hours, and in 1981, it reached over 1,790 hours. In 1979, the national average number of hours of trouble-free operation of integrated circuit units reached over 1,300 hours, in 1980, it reached over 2,000 hours, and in 1981, it reached over 2,300 hours. The percentage of faulty units discovered by retail shops after

opening the cartons from manufacturers and the percentage of repairs of new units visibly dropped. Among the 110 product models manufactured in 1981, nearly one-third were awarded superior quality awards. Their major technical indices had already reached the standards of similar foreign products. The technical quality of other products also improved by varying degrees. The quality of most products has relatively stabilized, and a preliminary reputation has been established. To continue to improve product quality, special meetings have been held to discuss and establish higher quality indices that should be reached by various types of major products in 1985.

(III) The Cost of Products Dropped Year By Year, Profits Increased Year By Year. At the beginning of 1979, when the bureau was founded, the production of television sets relied on subsidies from the state, and other products seldom generated a profit. All professions manufacturing the five media products (i.e., television sets, radios, tape recorders, record players, loudspeakers) suffered losses. To change this situation around, every year, a special meeting about high output and superior quality, varieties of products, low consumption, ways to change losses into profits, and ways to increase income and reduce expenditure was held. Problems in economic benefits, product structure and design, production technology, expenditure for consumption, product cost and business management were studied and analyzed continuously. Measures for improvement were established and goals to change losses around and to increase profits were set up. After efforts by many sectors, the prices of most components dropped. The cost of the five media products visibly dropped, losses were reduced, and profits increased. Taking 12-inch black and white television sets as an example, in 1979, the average cost of comparable products throughout the nation per units was 19.8 percent lower than that in 1978. By the end of 1979, the summary of the situation in all provinces, cities and autonomous regions showed that the losses throughout the industries manufacturing the five media products were turned around. After balancing losses against profits, a net profit of 32.07 million yuan was realized. Every type of media equipment realized profits of varying amounts. In 1980, the average cost of comparable products of black and white television sets throughout the nation dropped by another 12.3 percent from 1979. The overall cost of radios throughout the nation dropped by 5 percent from that in 1979. The net annual profit of the five media products in all the provinces, cities and autonomous regions throughout the nation was 147.32 million yuan, an increase of 3.6 times over the previous year. (In addition, various taxes submitted to the higher authorities amounted to more than 55 million yuan). Television sets which used to be the item with the most serious loss became profit generating units. The five types of products netted a total of 2.1 billion yuan in cash. In 1981, the cost of comparable products dropped 7 percent from that of the previous year. The annual profit was 260 million yuan, an increase of 76.9 percent over the previous year. The output of the five media products netted a total of 3.3 billion yuan in cash. The enterprises directly subordinate to the bureau realized a profit of 57.6 percent higher than planned, and registered a growth of 14.3 percent over the previous year.

(IV) The Development of New Products and Scientific and Technical Work Realized Results. The full frequency channel black and white television sets uniformly designed throughout the nation have already been introduced into the market. The two production lines for color television sets have already been inspected and have begun production. Tape recorders have advanced from simple recording and playback models to recording and receiving models, FM and AM models and stereo models. Corresponding experience was obtained in the production of assembly parts. Technical experience was accumulated in color [video] recording equipment by purchasing and importing components and assembling them, and the technology of producing magnetic heads and magnetic drums has been explored. One-kilowatt and 10-kilowatt meter wave color and black and white transmitters and differential tuners have been trial produced, their models have been finalized and production has begun. The newly designed centimeter wave television equipment has already entered trial manufacturing. The 8GC microwave branch line equipment has already passed evaluation. The development of color projection television, applied color television and new models of sound equipment has realized varying degrees of results. Visible results have been realized in the development and production of energy conserving products. In 1980, the national bureau organized the unified design of a new model 12-inch black and white television set which has gradually replaced the old models. Per unit consumption of electricity is 15 watts less. Calculating at an annual output of 5 million units, each year, 80 million kilowatt-hours of electricity can be saved. To replace all electron tube radios by semiconductor radios, the bureau organized 49 factors to develop 62 types of large semiconductor units. After mechanical and sound tests, the quality of sound of some products approached that of electron tube units. Each unit consumes an average of about 10 watts of electricity, using 35 watts or 78 percent less electricity than the electron tube units. If semiconductor units can replace all of the 1 million electron tube units manufactured each year at present, more than 20 million kilowatt-hours of electricity can be conserved each year, and a lot of metallic materials can be conserved. A lot of results have also been achieved in the production process by improving the technology and technical processes, efficiency, conserving raw material consumption.

(V) Progress in Capital Construction Was Faster, Comprehensive Productive Capability Visibly Improved. In recent years, the state's emphasis and the great support by all sectors provided more investment in capital construction provided gradually each year amounted to 129.83 million yuan, 469.6 million yuan and 361.79 million yuan respectively. Total investment in the 3 years was equivalent to 4 times the total in the 8 years from 1971 to 1978. The average investment in these 3 years amounted to more than 10 times the average in the previous 8 years. With the additional private funds collected in many regions and private funds of the enterprises, technical improvement and expansion were carried out, the ability to produce sets of products increased, the productive capability of weak links was strengthened, technological processes and technology were improved and perfected, and the general productive capability of the entire profession visibly improved. At the end of 1981, a newly built color television tube factory with an annual productive capability of 960,000 units was basically completed and the first batch of qualified products was produced. At present, factories that have been completed or

are about to be completed can produce about 3 million black and white television tubes and assemble 5 million television sets a year, assemble about 2 million tape recorders and manufacture 30 million to 40 million radios a year. The productive capability to manufacture various types of transmitters can basically meet present demands.

In general, the 3 years from 1979 to 1981 were years in which our nation's broadcasting and television industries progressed rapidly, but some problems still existed. For example; the scientific research strength was relatively weak, the technical standards of the staff and teams of workers was low, the varieties of products were few, replacement was slow, the quality level was low, producing factories were scattered, there were a lot of redundancy, batches produced were small, most equipment was old, outdated and backward, the level of production technology and technological processes was not high, efficiency was low, cost was high, and economic benefits were still few. These problems must be gradually solved in the future as we continue to implement on an overall basis the eight point policy for economic readjustment and the ten principles.

9296

CSO: 5500/4149

PEOPLE'S REPUBLIC OF CHINA

SICHUAN HOLDS MEETING ON RADIO, TELEVISION WORK

HK180404 Chengdu Provincial Service in Mandarin 0030 GMT 18 Jun 83

[Excerpts] A Sichuan provincial conference on radio and television work was held in Chengdu from 11 to 17 June. The meeting conveyed the spirit of the 11th national radio and television work conference, formulated measures for creating a new situation in Sichuan's radio and television, and set the aims of endeavor for the end of the century in light of Sichuan realities. During the meeting, responsible comrades of the provincial CPC Committee and government Tan Qilong, Yang Rudai, Xu Chuan, and Liu Chunfu, together with Comrades (Wang Da) and (Li Jun), met the participants and were photographed with them.

Comrade Tan Qilong said: Radio and television work is very important. You must run this business well.

The participants held: It is essential to carry out reforms in radio and television. By carrying out these reforms, we must catch up with the new situation of continuous political, economic and cultural development in the whole province, and truly turn radio and broadcasting into the most powerful modern medium for educating and encouraging the masses, and for building socialist material and spiritual civilization. This is the earnest hope placed in us by the party and people.

The meeting held: By the end of the century the province should build up a modern radio and television propaganda network integrating the province, cities, and counties, combining wireless with wired broadcasting, and achieving simultaneous development in radio and television and in the urban and rural areas. This network should have relatively high quality of propaganda, numerous program channels, advanced technology, and complete sets of equipment; it should accord with Sichuan reality and correspond to the building of the two civilizations throughout the province. Except for remote and sparsely populated areas, we should ensure within 3 to 5 years that all counties, cities, communes, and brigades are linked to broadcasting and that everyone can listen to the radio, and that the majority of counties can receive television. After a broadcast satellite is launched on the eve of the Seventh 5-Year Plan, we should ensure that all households and people should be able to see good-quality television broadcasts by the end of the century.

The meeting conveyed the series of principles and policies adopted by the 11th national radio and television conference.

Xu Chuan, member of the provincial CPC Committee Standing Committee and director of the Propaganda Department, spoke at the meeting. He reviewed the achievements in the province's radio and television since the 3d Plenary Session of the 11th Central Committee and stressed the important role of radio and television in building the two civilizations.

GUANGZHOU TELECOMMUNICATIONS CABLE PROJECT ACCELERATED

OW030758 Beijing XINHUA Domestic Service in Chinese 0019 GMT 3 Jun 83

[Report by reporter Zhou Shihao]

[Excerpts] Wuhan, 3 Jun (XINHUA)--Departments concerned in all localities in Hubei are actively supporting China's largest-capacity long-distance telecommunications cable project: the coaxial cable project from Beijing to Guangzhou via Wuhan. The construction of the project has been accelerated.

This coaxial cable is the second main cable for long-distance telecommunications which runs through China from north to south, and its capacity will be 100 percent greater than that of the already-laid long-distance telecommunications cable from Beijing to Hangzhou via Nanjing and Shanghai. When completed, the project will be able to serve 7,200 conversants between Guangzhou and Wuhan and 14,400 conversants between Wuhan and Beijing simultaneously. In addition, people in all major cities connected by the two main cables can dial and talk to each other just as if they were in the same city.

The Beijing-Zhengzhou section of the Beijing-Wuhan-Guangzhou cable project has been basically completed. The key portion of the project this year is in Hubei, where cables will be laid at a length of more than 510 km. To guarantee success in building the project, 10 countries through which the cable will run have established cable project offices. Communes and brigades have also assigned personnel to grasp the work by organizing the masses to work in coordination with specialized personnel. Some county leading comrades work at work sites. As of now, more than 500 km of cable has been completely laid north and south of the Changjiang River.

CSO: 5500/4159

RADIO, TV SCIENCE, TECHNOLOGY COMMITTEE SET UP

OW071219 Beijing Domestic Service in Mandarin 0400 GMT 5 Jun 83

[Text] The National Radio and Television Science and Technology committee [quan guo guang bo dian shi ke xue ji xu wei yuan hui] was inaugurated and held its first plenary meeting recently in Beijing. The meeting carefully summed up that experience in radio and television technological undertakings should, proceeding from reality and taking into consideration existing scientific and technological knowhow and the trends in its development, formulate a policy regarding radio and television technology that suits our country.

On the basis of the targets set forth by the 11th national radio and television work conference for attainment within this century, the committee members' consensus was: The emphasis of present technological endeavors should be on radio broadcasting through satellite, microwave transmission and other scientific and technological knowhow; expansion of the range of radio and television; and the development of FM and stereo broadcasts. In the long run, we should establish a technologically advanced, rationally distributed, economically efficient, good-quality, high-efficiency and modernized radio-TV transmission and covering network, basically relying on domestically manufactured equipment. At the same time, technical means in such fields as new coverage, editing, program production, transmission and communication should be modernized in order that by the end of this century good quality radio and television programs with rich contents, fine acoustics and clear pictures will be simultaneously available at the central and local levels and over 95 percent of our population will be able to hear good broadcasts and view good TV programs.

The meeting also proposed some concrete plans for technological development of our radio and television. (He Dazhong), chief engineer of the Ministry of Radio and Television, is the chairman of the National Radio and Television Science and Technology Committee.

CSO: 5500/4160

BRIEFS

FUJIAN TELEPHONE EXCHANGE--Fuzhou, 10 May (XINHUA)--An automated telephone exchange that can handle 10,000 telephones at once has gone into use in Fuzhou, capital of Fujian Province, according to the provincial people's government. The new facility was imported from Japan. A similar program control long-distance telephone system, also imported from Japan, is expected to be put into operation this October, the people's government said. [Text] [OW130343 Beijing XINHUA in English 1320 GMT 10 May 83]

SHENYANG DIRECT-DIAL TELEPHONES--Shenyang, May 25 (XINHUA)--An automatic long-distance telephone exchange system with 500 channels has been installed here and will begin operation soon in the Liaoning Province capital, a telecommunications hub in China's northeast, according to the city's telecommunications department. Started in 1976, the project is designed to facilitate telecommunications between Shenyang, a major industrial center, and other large cities in China. During trial operation, direct phone calls have been made to many cities including Beijing, Shanghai and Xi'an. [Text] [OW251353 Beijing XINHUA in English 0234 GMT 25 May 83]

SHANXI LONG-DISTANCE CALLS--The Shanxi provincial postal and telecommunications department recently allocated 170,000 yuan to renew the 12-channel carrier long-distance communication apparatus in Zuoyun County's postal and telecommunications bureau. [Excerpt] [Taiyuan SHANXI RIBAO in Chinese 1 Apr 83 p 3 SK]

NEI MONGGOL TELEVISION--Hohhot, 3 May (XINHUA)--Forestry workers in Nei Monggol's Greater Xingan Mountains are now able to watch television. Sixteen of the 19 forestry bureaus in the mountains have set up television relay stations or microwave television relay stations. [OW180615 Beijing XINHUA Domestic Service in Chinese 0011 GMT 3 May 83]

GUANGDONG TELEVISION RELAY STATION--The provincial government approved on 3 June a plan for building a television frequency modulation relay station in (Guifengshan) of Xinhui County, covering the eight counties of Jiangmen, Zhongshan, Xinhui, Doumen, Taishan, Kaiping, Enping, and Heshan. This television relay station will relay the Channel 14 television programs which will begin in August this year. It will also raise the reception quality of Channel 2 television programs and provide a signal source for the Pearl River Delta region so that the stereophonic broadcast of the provincial No 3 radio station will be clearly received in this area. [Text] [HK060922 Guangzhou Guangdong Provincial Service in Mandarin 2350 GMT 5 Jun 83]

CSO: 5500/4157

PHONE COMPANY ANNOUNCES UPCOMING DIALLING ADVANCES

Bridgetown BARBADOS ADVOCATE in English 16 May 83 p 2

[Text] Plans are moving ahead on schedule to convert the dialling system for phones in Barbados to seven digit numbers, in the first week of August this year.

The General Manager of the Barbados Telephone Company, Mr. Charles Evelyn, to the Advocate recently that this change in the dialling system from five digit numbers to seven digits, along with direct dialling of overseas calls on phones using the Grazettes Exchange is part of the Bds\$27 million the company will be spending this year on development.

The phones using the Grazettes Exchange comprise the last large segment of phones in the island not yet on the direct dialling system for overseas calls. The Grazettes changeover and expansion will require an expenditure of Bds\$10 million.

Mr. Evelyn said that the direct dialling system for these phones will be introduced at the same time that phones throughout the island change over to seven digit numbers.

The change-over will be made on the night of Saturday, August 6 and the morning of Sunday, August 7.

The company's expansion programme is now centred on the use of fibre optics which made it possible for more calls to be handled through less cumbersome equipment.

The system which converts sound into light to be reconverted by sophisticated equipment back into sound to permit communication, allows more than 600 calls to be handled at the same time on a single pair of fibres.

Mr. Evelyn said that workmen at the company had adapted to the new techniques satisfactorily and this was making it possible for the company to meet the planned August deadline for the proposed change-over in the system.

He explained that the company still had part of its equipment functioning on the Crossbar System which required more plant for its accommodation.

"The use of fibre optics gives us a lot more scope for future development," he said.

BELIZE

BRIEFS

GOVERNMENT'S TV PLANS--Minister of Home Affairs, Mr. Lindberg Rogers said this week that Government will in the near future introduce a law to help improve television programmes and television reception. Rogers, who was replying to a question put to him by a REPORTER newsman, said also that Government would soon be having its own television station and will be presenting much better programmes than Belize is now being offered. Minister Rogers said the Government could have brought down the hammer on existing television networks "long ago", but chose instead to draft new legislation. [Text] [Belize City THE REPORTER in English 22 May 83 p 1]

CSO: 5500/7569

CITING GOVERNMENT OBSTRUCTION, COMPANY SCRAPS PLANS FOR PAY TV

Starvision Decision

Hamilton THE ROYAL GAZETTE in English 10 May 83 pp 1, 5

[Text]

Starvision has given up its four-year fight to bring subscription television to Bermuda. The surprise decision comes as a result of the failure of Bermuda Communications Corporation Ltd., owner of Starvision, to raise \$1.2 million in public shares.

Mr. Arnold Francis, president of BCC, said that the public offering of shares had attracted only 100 people. He would not be drawn on how much money those 100 had put up, other than to say it did not come anywhere near \$1.2 million.

It appeared, explained Mr. Francis, that despite the proven feasibility of the new television technology as evidenced by the number of earth stations that were sprouting up across the country, not enough Bermudians were prepared to invest in subscription television.

He went on to attribute a great part of the failure of

the project to Government's "unclear and sometimes contradictory position concerning satellite television."

"We have been buffeted about by no policy and a policy that shifted about like shifting sands," he said.

There was also confusion between Starvision and Cablevision, which wants to bring in cable television.

"Indeed there is also still confusion in the minds of many people over the difference between our proposed technology, that is over-the-air subscription television, and Cablevision, which must, as the name suggests be carried by cable to each individual householder," he said.

Mr. Francis stressed that the BCC would not be wound up. The directors would be exploring other avenues of profitable activities in the communications field.

The surprise pull-out of BCC would have left the field clear for Cablevision president Mr. Gavin Wilson to bring in an alternative to much-criticised commercial television stations ZFB and ZBM, owned by the Bermuda Broadcasting Company.

As the only applicant for cable television, Mr. Wilson was expected to get a Government licence. But a late bid by a United States group Multi-Channel Cable Vision means that Government has to decide between the two.

• The Bermuda Broadcasting Company last year announced plans to start a subscription TV channel this year. Neither Mr. Martin Smith, president of Bermuda Broadcasting Company, nor the Hon. Quinton Edness MP, managing director, could be reached for comments in light of Starvision's pullout. Both men are overseas.

Attack on Government Policy

Hamilton THE ROYAL GAZETTE in English 13 May 83 p 2

[Text]

Starvision directors yesterday accused Government of "blatant" reversals on telecommunications policy which caused de-

lays and stumbling blocks for the introduction of subscription satellite television in Bermuda.

Government policy has "stacked the deck" against Starvision and finally contributed to its failure, the directors claimed.

Directors of Bermuda Communications Corporation, which runs Starvision, were hitting back at comments made this week by the Hon. John Stubbs, Minister of Industry and Technology.

The Minister defended Government's policy, saying it was consistent and concerned for public interest.

And in a remark which particularly angered Starvision's board, Dr. Stubbs blamed the company's failure on the "generous way" company directors had treated themselves.

Starvision president Mr. Arnold Francis announced on Monday that the company had given up its four-year fight to operate pay television.

The pull-out followed Starvision's failure to raise the \$1.2 million it wanted in a local public share offering. Mr. Francis also directed some blame to Government's confused policy.

In a letter to the Editor, Mr. Francis said: "We take great exception to Dr. Stubbs's remarks about the 'generous way in which directors of the company had treated themselves' in view of the fact that the Minister obviously knew nothing of the company's financial background, in particular the amount of money and effort invested by the directors in this venture."

It was "purely fantasy" to suggest that the directors retained a majority share.

"Had the issue been fully subscribed, the roughly 100 existing shareholders would have owned 50 percent of the stock in Starvision and the 14 directors a fraction of that."

The director with the largest shareholding would have been paid "less than nine percent" of the company's dividend share-out.

Mr. Francis said that Government "has completely ignored virtually all the major recommendations" of the board of inquiry into public broadcasting.

"Government has reversed itself on several key issues, including channel allocation, a common broadcasting tower and advertising content of broadcasts."

Almost exactly one year ago, the Hon. Sir John Sharpe, Minister of Home Affairs issued a broadcasting policy statement in

the House of Assembly based on a report made by the Broadcasting Commissioners.

The report recommended that the ZBM takeover of ZFB should be permitted provided all organisations were allowed to compete freely in the broadcast market without unnecessary Government impediment or restraint.

But on March 11 this year, within three weeks of Starvision's share offering, Government informed the company that it would "not be considering applications for any subscription television until after September 30".

After that date, the Industry and Technology Minister would invite full technical, financial and legal submissions in support of applications and would also decide on the decoder to be used.

Mr. Francis noted that Minister had stated that he would make a decision on the successful cable television applicant by the end of June.

"Taking into account that Starvision has already made two such submissions, totalling well over 300 pages, and that Government has now had 30 months to consider the relatively trivial technical matter of decoder technology, we believe we are entirely justified in reaching the conclusion that this recent decision by Dr. Stubbs constitutes unnecessary governmental impediment and thereby represents a blatant reversal of the stated policy of the Minister for Home Affairs.

"By creating further delays in the implementation of the Starvision system of at least several months, the Minister left the directors no option but to withdraw its public prospectus in the interest of public investors whose capital would perforce have lain dormant during this period of indefinite further Government delays.

"It is, therefore, incomprehensible how the Minister can at this juncture claim to be showing concern for the public interest."

New ventures in the fields of high technology are always a game of chance, Mr. Francis continued.

"When confronted by a stacked deck, prudent men will always leave the table.

"Starvision has chosen to do just that. Unfortunately, the ultimate loser is the public."

Mr. Francis's comments were made on behalf of Starvision's board of directors.

BRIEFS

SATELLITE DISH POLICY--The growing number of applications to erect satellite receiving dishes for commercial use has prompted the Planning Department to draw up a policy report. Planning Director Mr. Erwin Adderley said yesterday his department wanted to get a grip on the situation before becoming "overwhelmed". "We are becoming concerned about the number of commercial applications we are receiving for these type of installations," he said. "There has been an increase in the recent period. There is an indication that this type of technology may be taken more advantage of in the near future. We want to get in a position to deal with them. There has not been a great proliferation but we have received more than one or two and feel it may be a trend. We do not want to become overwhelmed." Mr. Adderley said a report had been prepared on home installations and one on commercial dishes was expected in the near future. "We are working on it in terms of location. Licensing would probably come under telecommunications," he said. "We want to ensure that everyone is treated the same." [Text] [Hamilton THE ROYAL GAZETTE in English 12 May 83 p 5]

CSO: 5500/7570

CUBA

BRIEFS

CHAIRMAN OF OIRT--Nivaldo Herrera Sardinias, president of the Cuban Institute of Radio and Television, was elected today in Bucharest as chairman of the International Radio and Television Organization [OIRT] for the next 2 years. The meeting of OIRT also approved the membership of the People's Democratic Republic of Yemen, Laos, Afghanistan and Nicaragua. OIRT is the specialized organization comprised of the radio and television organizations of a great number of countries, among them the entire socialist community. [Text] [FL190146 Havana Domestic Service in Spanish 2300 GMT 18 May 83]

RADIO AGREEMENT WITH ROMANIA--Romanian and Cuban radio and television officials have expressed optimism with respect to future increases in the exchange of programs and information, agreed to in a protocol signed in Romania. The protocol was signed by Ilie Radulescu, director general of Romanian Radio and Television, and Nivaldo Herrera, president of the Cuban Institute of Radio and Television. [Text] [FL191436 Havana Domestic Service in Spanish 1100 GMT 19 May 83]

APPROVAL OF RADIO MARTI--The U.S. Senate Foreign Relations Committee has approved the establishment of a counterrevolutionary radio station aimed at broadcasting subversive propaganda against the people and Government of Cuba. Approval of the project by 13 votes for and 4 against will allow the Reagan administration to use \$9.7 million to put the radio station on the air. The Senate Foreign Relations Committee turned down a proposal by Senator Edward Zorinsky to provide a time slot for broadcasts to Cuba via the so-called Voice of America. Nevertheless, the committee approved \$5 million to compensate U.S. commercial stations which may experience radio interference from Havana as a result of the establishment of Radio Marti. During the debates, Senator Clairborne Pell said that the establishment of Radio Marti could damage Washington-Havana relations even further, a prospect which he said would not benefit U.S. interests. [Text] [Havana Domestic Service in Spanish 1100 GMT 9 Jun 83 FL] The Foreign Affairs Committee of the U.S. House of Representatives last night approved a proposal for the establishment of a counterrevolutionary radio station to broadcast anti-Cuban propaganda. The project should now be ratified in

a joint session of Congress where a great number of congressmen say that this new Ronald Reagan maneuver will only worsen relations between the United States and Cuba. The House committee also rejected an amendment offered by Democrat Peter Kostmayer which would have placed the new counterrevolutionary under the control of the so-called Voice of America which for many years has beamed daily broadcasts against the Cuban revolution. [Text] [FL111340 Havana Domestic Service in Spanish 1100 GMT 11 Jun 83 FL]

CSO: 5500/2078

BRIEFS

NEW GBC TRANSMITTER--The facility, bought in Brazil, has the ability to produce 10 kilowatts on the medium wave band on 760 kilohertz. It replaces a 25-year-old transmitter which has become unserviceable because of its age. Just before commissioning the equipment Minister responsible for Information Yvonne Harewood-Benn urged employees of the GBC to rededicate themselves even further to satisfying the needs of the Guyanese people. She expressed the hope that in the near future the corporation would be able to acquire more new equipment to further improve the standard of the local radio service. Cde. Lambert Philadelphia, Executive Chairman of Guystac's Information and Communication Services Group, congratulated the engineers who worked on the transmitter. "Were it not for their skill and dedication, the old one would not have lasted so long", he added. [Georgetown SUNDAY CHRONICLE in English 1 May 83 p 24]

CSO: 5500/7568

SWEDISH L M ERICSSON FIRM GETS INJECTION OF CAPITAL

Stockholm DAGENS NYHETER in Swedish 21 May 83 p 9

[Article by Bengt Albons]

[Text] Over 3,000 companies in Mexico are threatened by strikes unless employers agree to 50-percent wage increases before 30 May. The threatened strikes, which must be seen on the background of Mexico's 100-percent inflation rate, come as President Miguel de la Madrid has stated that the economic crisis has begun to level off. President de la Madrid has asked the labor unions to reduce their wage demands and employers to accept lower profits than they had hoped for.

Employers believe there will be many bankruptcies if the labor unions persist in their wage demands. Seventy five percent of all companies will make no profit at all this year, according to industry representatives, and 15 percent of all companies are on the verge of bankruptcy.

Mexico City, May--The serious Mexican crisis has hit most of the many Swedish companies here extremely hard. Most companies have suffered great losses since the economic collapse in the middle of last year. There also have been sharp reductions in personnel, but Swedish industry has no plans to leave Mexico.

Instead, Swedish business leaders here believe that the trend will change. It could even be said that their view of the future is based on a certain amount of optimism. In addition, Swedish investments here are too heavy for Sweden to pull out.

No one can say exactly how great the investments are, but a Swedish businessman here said that they are considerably higher than the 1.2 to 1.4 billion kronor figure that has appeared in the Swedish press. It may be closer to 2 billion kronor.

All major Swedish companies, except the automobile manufacturers and Swedish Match, are represented here. Many have been here for a long time and most are involved in local production.

The largest is the telephone company Ericsson, with a factory and an office at Calle LM Ericsson (LM Ericsson Street) in the relatively new industrial region of Tlalnepantha on the outskirts of enormous Mexico City. Several other Swedish factories also are located here. They almost dominate the region. In recent years Sweden has been the fourth or fifth leading foreign investor.

Ericsson's local manager Raimo Lindgren said that this past year was the worst since the telephone manufacturer began operating in Mexico at the turn of the century. The 1982 losses totaled about 35 million kronor.

No Hesitation

"We are not hesitating to invest more money. Even though we lost money last year, we have not forgotten that we have earned money here before," Raimo Lindgren said.

"We were brought to our knees in 1982, but we did not go down for the count," Lindgren continued. "We have been forced to make personnel cuts. Since February of last year we have reduced our personnel from 3,700 to 2,600. And we have not yet reached the bottom. We must lay off about 100 more employees."

The situation here is similar for other Swedish companies. Asea, for example, has reduced its number of employees from 900 to 620.

Both companies suffered enormous losses on foreign loans and both need new capital to make it through the crisis and expand in the future. For Ericsson, this means a new issue of shares and capital contributions of 150 to 200 million kronor from the parent company. The Mexican shareholders who control 40 percent of the company have no money to invest. This means that the Swedish share will increase to 80 or 90 percent.

300 Percent

The losses were so large (35 million on gross sales of 300 million, in Ericsson's case) because Mexican currency was devaluated several times.

"We had counted on the devaluation, but we did not know it would be as high as 300 percent," Ericsson chief Raimo Lindgren said. "But now we must try to eliminate our dollar debt."

After losing money in 1982, Lindgren hopes to break even this year and turn a profit in 1985.

Ericsson has 60 percent of the telephone network in Mexico and half of the planned new installations. Sweden is making large loans to Mexico so that the semistate-owned Mexican telephone company can afford new investments and so that Ericsson will receive orders.

Negotiations currently are underway for a loan of 200 million Swedish kronor, which basically is a government loan mediated by S-E Banken.

Many Loans

A rough estimate of Swedish loans to debt-ridden Mexico (which has a total foreign debt of about 637.5 billion kronor) is well over 1 billion kronor.

The head of S-E Banken in Mexico City, Ambassador Carl Swartz, cannot give an exact figure, however.

"So many types of loans are involved from our banks in London, Geneva, and New York, We have participated in the major international loans, we have loans to both Swedish and Mexican companies, and we have given deliver credits," Carl Swartz said.

"I see no eminent danger that we will lose anything, at least not on the Swedish side. These credits are backed by extensive guarantees and so far we have lost nothing. But the Export Credit Board believes that Mexico is in a credit crisis."

"Despite this, I am less nervous than most people in Sweden," Swartz said.

Bleak Prospects

Mexico's dollar shortage and the tough new import restrictions contribute to the problems of Swedish companies. These restrictions create bleak prospects for Swedish exports to Mexico, but also make it difficult for companies to obtain the required production materials.

"This is hurting all Swedish companies here," trade secretary Carl Sundberg at the Swedish Chamber of Commerce in Mexico City said. He reported that Swedish exports to Mexico totaled about 1 billion kronor last year. Thus, Mexico was one of Sweden's 20 largest trade partners, although it is expected to be lower on the list in the future.

What will become of the much discussed Swedish export of nuclear technology to Mexico?

When the enthusiasm and faith in the future were at a peak 3 or 4 years ago, Mexico planned to build 12 or 13 nuclear power plants. Asea was one of many large international companies that turned in bids before the crash came and the nuclear power project was shelved. King Carl Gustaf and Queen Silvia visited Mexico, among other things to help Asea in its efforts.

Two Power Plants

Now Mexico is building two nuclear power plants. The first may be completed by the end of next year, but probably not until 1985.

"This does not mean the end of nuclear power here. The project probably will

be revived when the economic situation improves," said Asea's chief in Mexico City, Bo Persson.

"But first the nuclear plants now under construction will be completed and the results evaluated. By that time it may be 1987. Asea does not intend to wait until then. We will conduct follow-up work before then," Bo Persson said.

He stressed that Asea bids on many projects that it never receives.

"But our trademark is our patience."

"We can send someone else over here at any time, but until further notice I will be in charge of nuclear power, as well," Bo Persson said.

In addition to pure nuclear power technology, Mexico also needs storage facilities for nuclear fuel. This is one thing Asea knows about, stressed Persson, who is optimistic about Asea's prospects in other areas as well. Thus, for example, Mexico's power needs increase by 6.5 percent annually. To be sure, this figure is down from a previous growth rate of 9 percent, but it is considerably higher than, for example, the growth rate of Sweden's power requirements of 2 percent.

Asea believes it can turn last year's losses into profits as early as this year. But this would require an injection of Swedish capital and a reduction in the all-too-high dollar loans.

The Swedish company in Mexico that may be doing the best is Electrolux, which controls 60 to 64 percent of vacuum cleaner sales here.

"The reason for this is that we are 98 percent integrated into the local economy and we have no foreign loans," said Electrolux chief Jan Laseen in Mexico City.

On the other hand, Electrolux is dependent on about 100 local suppliers who, in turn, are dependent on imports. That could cause difficulties in the future.

At present, however, Electrolux has experienced no decline. On the contrary, there are plans to increase Electrolux production. No employees have been laid off by the firm, which has about 1,000 workers. In addition, vacuum cleaner sales are going well, despite the crisis and the general slump.

9336
CSO: 5500/2706

CABLE TV SYSTEM SET TO BEGIN LOCAL OPERATIONS SOON

Castries THE WEEKEND VOICE in English 30 Apr 83 p 1

[Text]

A CABLE television system is to go into operation in St. Lucia in a few days time. It will cost subscribers \$175 a year with an installation fee of \$80.

Mr Dennis Cox, Managing Director of Cox' Radio Cablevision Service, told THE VOICE that the system is currently being tested, and will be officially launched shortly.

The service will be introduced firstly in the La Toc area, where the system will be based, and the main cable trunk will be taken to the city and up the Morne. Afterwards the system will be distributed to other areas.

Cable Television is a new and rapidly improving technology. It does not involve having to invest in expensive production studios and facilities.

Mr Cox said that initially, his system — to be powered by solar energy — would not be relaying new television programmes. It would be concerned primarily with receiving existing local stations (SLTV, HTS, Martinique) and distributing them over coaxial cables with a greatly improved reception and high definition.

He pointed out that viewers using the system would now enjoy better pictures. Another advantage was that TV sets tuned to the system would now receive the sound and picture of all stations currently being received locally.

Mr Cox said he would also be offering a public service information channel, but this would not be commercial. Programmes from Trinidad Television (TTT) might also be distributed later.

Mr Cox who has been engaged in the field of electronics

for the past 16 years designed the system himself. He worked in cable television in Canada where he was employed with CHFI Rogers Broadcasting in Toronto. From there he was transferred to the company's branch in Hamilton, as Chief Engineer.

In Canada, Mr Cox attended several seminars and workshops on cable television. Before branching out into television, he was engaged in designing language laboratories in Toronto.

Mr Cox hopes that within a year, he would be serving the entire Castries and Vieux Fort areas. The first areas however will be La Toc. This main trunk line will also touch the Morne and the city. From this spurs will run into other areas like Entrepot, Marchand finally spreading to all other areas.

According to Mr Cox, the Company will provide everything subscribers need for the system. He said the Company would make public announcements in due course as to when it would begin serving various areas.

He explained that under the system, his Company would run overhead cables throughout the country, to which subscribers television sets would be connected. Only those who paid the required fees would be able to receive the service.

TRINIDAD AND TOBAGO

BRIEFS

TOBAGO TELEPHONE EXPANSION--Scarborough--Scarborough is to get an additional 300 telephones by the middle of July under a short-term development programme currently being carried out by the Telephone Company. There are now 1,200 telephones, business and residential, in the capital of Tobago. And the additional 300 lines will ease, to some degree, the growing demand for more phones. The short-term programme, costing \$4.5 million, is being met from funds of the Tobago House of Assembly voted for the project in the Assembly's 1982 Budget. According to Mr. Hochoy Charles, secretary for Works, two other areas are included in the present programme of short-term development. Roxborough, he said, will get an additional 100 telephones by mid-July while Mt. Pleasant is to get 89 by the end of October. There are plans, too, said Mr. Charles, to increase the number of telephones at Charlotteville by 120, and both the Assembly and Telco are hoping that this will be achieved by October this year. A meeting between Assembly officials and representatives of Telco was held last Wednesday at Mr. Charles's office in Scarborough at which both the present programme, and long-term plans which include the installation of digital dialling, were discussed. Representing Telco at that meeting were Mr. M. Larsen, general manager, technical operations, Mr. A. Roberts, customer services manager for the North Eastern and Tobago areas, and Mr. R. Telemaque, manager, Tobago.

CSO; 5500/7574

TELECOMMUNICATIONS PROJECTS REPORTED

Algiers EL MOUDJAHID in French 13-14 May 83 p 3

/Article by Cherif Haddad: "Efforts to Improve the Quality of Service in Constantine"/

/Text/ The minister of post offices and telecommunications, who spent this past week in the eastern part of the country, visited Bejaia, Jijel and Constantine successively.

After acquainting himself with the problems that the telecommunications sector faces in these wilayas, where measures have been taken to remedy the situation, Mr Rouis completed his inspection and working tour in the eastern part of the country by paying a visit to the wilaya of Constantine on Thursday.

The minister of P. and T. had the opportunity during his tour to see for himself the accomplishments in his sector.

And so he inspected the postal agencies in Grarem, Mila, Chelghoum-Laid as well as the telephone exchanges in these same localities.

Taking advantage of his visit to Constantine, the minister of P. and T. proceeded to inaugurate Culture Week in Mila, while in Chelghoum-Laid he closed Culture Week festivities with a horse race.

After having lunch in Chelghoum-Laid, the ministerial delegation headed for Constantine where Mr Rouis visited the computation and postal receipts center in the town of Daksi. The computation center, which was inaugurated by the minister, has modern equipment.

All during his stay in the eastern part of the country, the minister of P. and T. took an active interest in the problems encountered in the exercise of their mission by officials in the field of posts and telecommunications. In his comments, the minister stressed the pressing necessity to offer the best quality service to users of the post office and telecommunications networks.

In the matter of telecommunications--particularly telephone service-- a noteworthy increase has been registered in Constantine, which has gone from 4,546 lines in 1967 to 23,906 lines in 1983, giving a current average of 3 lines

per 100 inhabitants. In spite of this effort to meet demand, the number of requests for service does not stop growing. At the end of the first trimester of 1983, it stands at nearly 11,000, of which 7,000 are for the city of Constantine.

The post office and telecommunications administration has not remained insensitive to this crucial problem. It also foresees seven new telephone exchanges for the wilaya of Constantine under the Third Plan title (Constantine-Bellevue: 20,000 lines; Constantine-Boussouf: 30,000 lines; Ain-Smara: 5,000 lines; Mila: 5,000 lines; Chelghoum-Laid: 5,000 lines; Didouche Mourad: 2,000 lines; El-Khroub: 5,000 lines) with the extension of the telephone exchanges at Mila, Chelghoum-Laid and El-Khroub to bring their capacity up to 2,000 lines each.

Seventy thousand new pieces of equipment will be used to reinforce the existing telecommunications infrastructure in the wilaya of Constantine.

As for the county seats of those districts that do not have a telephone exchange, arrangements have been made to link them to the automatic network by 100 to 200-line concentrating systems. This equipment is already in service in Grarem, Hamma-Bouziiane, Oued-Athmenia, and will be in service within a short time in Ain-Abid.

Modern equipment is likewise foreseen for Tadjenanet, Ibn-Ziad and Didouche Mourad as well as about 10 localities of lesser importance.

The object is to achieve complete automation in the wilaya of Constantine by the end of the Third Plan. Numerous projects in both the postal agency and in telecommunications are likewise planned in the wilaya.

9895

CSO: 5500/4615

TRANS-SAMARIA CABLE UNDER CONSTRUCTION

TAL31503 Tel Aviv ITIM in Hebrew 1340 GMT 13 Jun 83

[Text] Jerusalem, 13 Jun (ITIM)--The Trans-Samaritan Communications Cable is in the first stages of construction. This will be the main communications artery connecting the national telephone system in the Sharon region via the hilltop settlements as far as Ma'ale Efrayim over the Jordan Rift Valley. This main artery will be split up into branches that will supply telephone, telex, and computerized communications to all the settlements in the area.

This was disclosed today by Communications Minister Mordekhay Tzipori at a meeting with the heads of the councils in Judaea and Samaria, held in Bet El. The meeting was also attended by the director general of the Ministry of Communications, Mr Eliyahu Baraq, Mr Beni Katzover, the head of the Samaria Council, representatives of the councils, and field engineers.

Last year the Ministry of Communications connected all the new settlements in Judaea, Samaria, and the Galilee to the national telephone grid and installed a series of modern telephone exchanges. As part of this year's development program, additional exchanges will be installed and the ministry is aiming to grant the telephone requests of most of the settlers.

Minister Tzipori stressed that less than 7 percent of the ministry's development budget was being devoted to the regions of Judaea, Samaria, and the Gaza District. The 'Arava, the Dead Sea area, the Qatif area, and the Galilee are included in the preferential areas involving distant regions.

CSO: 5500/4531

LEBANON

BRIEFS

PROTOCOL WITH ROK--Post and Telecommunications Minister George Afram today signed on behalf of the Lebanese Government a financial and technical protocol with the South Korean ambassador in Beirut. The agreement amounts to \$4 million, including technical expertise. The agreement provides for the installation of telephone cables, the setting up of new facilities, and the examination of the telephone system in the Beirut and B'abda areas. [Excerpt]
[NC010801 Beirut Domestic Service in Arabic 1130 GMT 31 May 83]

CSO: 5500/4530

ALL DISTRICTS TO HAVE DIRECT DIALLING BY 1984

Colombo SUN in English 18 May 83 p 3

[Article by Winston de Valliere]

[Text] Posts and Telecommunications Minister D. B. Wijetunga announced yesterday that by the end of 1984 almost all the districts in Sri Lanka would have direct dialling facilities.

This includes the provision of direct dialling facilities to 500 sub post offices and a general improvement of services in 13 districts at a cost of Rs. 1,000 million. The programme to provide these improvements is under a Rs. 1,000 million I.D.A. sponsored project, he said, inaugurating a two-day seminar and exhibition on telecommunication at the B.M.I.C.H yesterday.

Total cost of major projects in posts and telecommunication upto end of 1985 is estimated to scale Rs. 2,000 million, he added. The Minister said it was not irrelevant to observe that Sri Lanka was the first country in Asia to introduce digital technology in the national telecommunications network

The U.N.D.P. representative in Sri Lanka N. H. Bradshaw announced the formulation of a draft master plan for the Colombo Metropolitan area with U.N.D.P. technical assistance to improve the telecommunications network in a bid to meet demands of industry, commerce and the general public. The U.N.D.P. and the Department of Telecommunications were also jointly preparing project proposals for U.N.D.P. funded technical assistance for islandwide telecommunications projects during the period 1984 to 1986, he added.

Mr. Bradshaw simultaneously sounded a note of warning that Sri Lanka would meanwhile do well to pay more attention to day-to-day crisis management in telecommunications. This was becoming a dominant need in a situation of rapid changes in telecommunications services, he said.

In view of the fact that telecommunications investments in the country were expanding very rapidly there was an urgent need, he said, for technical expertise in engineering, maintenance and installation works. The need had been accentuated by the brain drain in this field. The UN would meanwhile continue its assistance in kind and expertise to help Sri Lanka's expansion and improvement in telecommunications, he said.

He noted that capital investments in Sri Lanka in Posts and Telecommunications for 1983/87 was nearly Rs. 4.4 billion. The U.N.D.P. would meanwhile be providing Rs. 1,000 million to the Telecommunication Department to further develop the capacity of the Telecommunications Training Centre, he added.

CSO: 5500/4743

RESULTS OF COMMUNICATIONS MINISTER'S TOUR OF INTERIOR

Niamey LE SAHEL in French 16 May 83 p 3

[Article by Mohamed Mádou, Amadou Oumarou, and Moussa Hamani: "End of Trip by Minister of Posts and Telecommunications"]

[Excerpts] Brah Mamane, minister of posts and telecommunications, returned to Niamey yesterday afternoon at the end of his trip through the interior of the country to gather information and inform the people. Before returning to Niamey Brah Mamane yesterday visited the radio antenna network and the post office in N'Konni, as well as in Birni N'Gaoure.

The minister of posts and telecommunications has completed a visit to the interior of the country to gather information and inform the people.

Visit to Agadez

In Agadez on Saturday [14 May] Brah Mamane made a series of calls and met with officials of the local branches of the Ministry of Posts and Telecommunications.

The first visit took Minister Brah Mamane to the radio-reception center, which is in contact with Bilma, In'Gall, and Iferouane. A fourth circuit is to be opened.

The minister's party then visited the fully automated telephonic complex.

The complex in Agadez presently has 221 subscribers, 210 of whom have already been connected. Over the long term the network can serve 1,000 subscribers.

The third visit by Minister Brah Mamane was to the post office. To relieve crowding at this center, new buildings will be needed, as the present facilities are inadequate.

The fourth visit by the ministerial delegation was to the radio transmitter directly linked to the radio-reception center.

Lt Col Abdou Ide, prefect of Agadez Department, urged a longer period without transmissions in order to ensure continuity of broadcasts during transmissions. The last visit was to the radio antenna, one of the best developed in the country. Minister Brah Mamane and the members of his group received a briefing on the functioning of this very fully-developed antenna, which is like those in Niamey and Diffa.

However, it is believed that the frequency modulation radio signal is not being fully used at present, and the Ministry of Information must consider this question.

At the end of these visits the Minister of Posts and Telecommunications Brah Mamane, presided over a meeting of officials at the MJC [Center for Young People and Culture] in Agadez.

On this occasion Brah Mamane informed the post and telecommunications officials in Agadez of the purpose of his trip, which is aimed at improving the service provided by the Ministry of Posts and Telecommunications.

It is a matter of seeing what has been done and what remains to be done and finally to exchange points of view to improve efficiency.

The minister said that there is no place more appropriate than Agadez to see the great progress made in the telecommunications area in Niger, to appreciate the size of the investments made, and to appreciate the political effort made by the CMS [Supreme Military Council] and the government in this connection.

The ministerial party left Agadez yesterday morning [15 May].

Visit to Tahoua

The ministerial delegation led by Brah Mamane arrived in Tahoua on Thursday. On Friday Brah Mamane visited post and telecommunications facilities and met with officials of his ministry.

Tahoua Department has three communications systems: the radio network, which has great capabilities for communications as it has 24 separate channels (there are 12 automatic circuits, 12 manually-operated circuits, and three telex circuits now in operation); the electricity transmission system; and the radio broadcasting system.

To maintain its supply of electricity in case of an interruption, the Tahoua telephone switchboard and the radio network have automatically-operated generators and a battery-operated emergency electricity system.

At the post office there is a problem of delays due to frequent interruptions in service.

Regarding the post office building now under construction, the work is nearing completion. The final cost will be about 90 million CFA francs.

At the end of these visits Minister Brah Mamane held a meeting at which he informed the officials of his ministry, as he did in the other regions visited, of the purposes for this trip. These visits were technical in nature, of course, but they played a role in the establishment of a development-oriented society. What was needed was to inform and sensitize all postal employees, whatever position they hold, of the role they play in a development-oriented society.

5170

CSO: 5500/160

BRIEFS

DIFFA DEPARTMENT'S IMPROVED COMMUNICATIONS--Diffa Department, which once had great difficulty in receiving the "Voice of the Sahel" radio programs, now has equipment making it possible to receive all domestic radio telephone broadcasts perfectly. Since last Sunday the people of Diffa and the surrounding area have been able to hear the "Voice of the Sahel" on the medium wave frequency of 1484 KHTZ [Kilohertz], which corresponds to the 210 meter band. This reception by Diffa residents has been made possible through the installation of a 100 watt transmitter. Today, therefore, the listeners in Diffa are pleased to receive the "Voice of the Sahel" as well as listeners in Niamey. Previously, radio reception was difficult, if not impossible, for some radio-receivers, because of the location of Diffa, more than 1,360 kilometers from Niamey. Let us say, therefore, that since Diffa has been provided with communications in terms of telephone, television, roads, and air service, the improved radio reception has successfully ended the isolation of the region. We also note that the repairs to the medium wave retransmission station at N'Guigmi are under way. [Text] [Niamey LE SAHEL in French 17 May 83 p 3] 5170

CSO: 5500/160

TELEPHONE SERVICE IMPROVES; DEMAND INCREASES

Victoria NATION in English 20 May 83 pp 1, 10

[Text] A R65-million investment including the latest in telephone technology, is enabling Seychelles Telephones Ltd. to offer quicker, better and more varied services to the public and to meet the country's needs for the next 15 to 20 years.

Seychelles Telephones manager Albert Payet announced yesterday that once a backlog of 1,500 would-be subscribers was cleared by September this year, anyone wanting a private telephone would be able to get one without the long wait that has been necessary up to now.

Mr. Payet also announced that within the next four months, and for the first time in Seychelles, subscribers there would benefit from the International Subscriber Dialling' system. This would allow callers to dial overseas from their homes without going through international operators and booking calls.

Another new service, a

Speaking Clock' with a beautiful voice, is already available, announcing the exact time instantly when dialed on number 14.

The new, computer-controlled exchange will be able, over the next six months, to provide Seychelles' telephone services with another 3,500 lines to add to the 5,000 in use up to now.

However, as demand increased with the country's development over the next decade, Mr. Payet said, the new exchange could be easily modified to provide up to 20,000 lines.

With such capability, Seychelles Telephones can now safely offer any family a home telephone once connections speed up after the waiting list is cleared over the next three to four months.

With the old exchanges either at saturation point or no longer economical to expand, applicants were having to wait some time for vacant lines.

The new exchange is al-

ready serving subscribers of Bel Air, Bel Eau, Sans Souci, Francis Rachel Street, Pointe Conan, Quincy Village, Ma Constance, Anse Etoile, Maldive, La Retraite, North East Point, Machabée and l'Ilot with new telephone numbers as printed in the 1983 directory.

Praslin and La Digue islands are also included in the re-development of the country's telephone services but they will have to wait until 1983 when engineers will be free to move over from Mahé.

CSO: 5500/163

WORK ON MICROWAVE LINK EXPERIMENT SCHEDULED

Bulawayo THE CHRONICLE in English 13 May 83 p 1

[Text]

THE Posts and Telecommunications Corporation will begin work on an experimental microwave link between Kwekwe and Gokwe in August, the Minister of Information, Posts and Telecommunications, Cde Nathan Shamuyarira, said yesterday.

Speaking in Bulawayo at the end of his tour of microwave installations in Matabeleland North, he said the experimental link would be copied from the Canadian telephone system.

The project would be financed by Canada and was part of the PTC's "thrust" into the rural areas, said Cde Shamuyarira.

CLEAR LINES

"If this project is successful it will form the pattern that will be used throughout Zimbabwe. It will enable us to have telephones in most rural areas and we want telephones installed in Post Offices, schools,

hospitals and council offices," he said.

Telephones could also be installed in private homes if the people wanted them.

Microwave would greatly improve the situation for rural peasants and for commercial farmers in the rural areas, enabling them to have clear lines and good reception, said Cde Shamuyarira.

Dissident activity in the Gwanda and Plumtree areas had slowed down work on new exchanges and microwave stations, but work was now proceeding well.

Cde Shamuyarira visited these two areas yesterday and said he was pleased to see that work was moving ahead quickly on various PTC installations, which would be completed at the end of the year.

The old telephone exchange in Gwanda was being extended and a new one with new equipment was being installed. New buildings and equipment were also being installed at Plumtree.

He said the equipment in most rural exchanges was very old and this was the

case in Plumtree and Gwanda. New equipment was now being installed and this would improve telephone communications to and from these areas.

Radio and television transmitters would be added to the telephone installations which would improve reception in these areas, he said.

The PTC was anxious to penetrate the rural areas and was therefore transforming its equipment.

FUNDING

Cde Shamuyarira corrected an earlier report that the \$140 000 000 which is being spent on upgrading the country's telecommunications, is being provided completely by Sweden and Norway. The two countries were funding the microwave link between Bulawayo and Francistown, while the Government and PTC were paying for the rest of the programme.

Cde Shamuyarira said his Matabeleland tour had been very successful and pleasing. He praised PTC staff who were working hard towards the completion of the various projects.

COMMUNICATORS' CONTRIBUTION TO FOOD PROGRAM

Moscow VESTNIK SVYAZI in Russian No 1, Jan 83 pp 2-3

[Article by V. N. Lebedev, deputy minister of USSR communications: "A Vital Matter"]

[Excerpt] The 26th CPSU Congress came forth with an enormous program for the social development and improvement of the national well-being. Particular attention is to be paid to solving problems associated with improving the supply of food products to the population. A USSR food program to the year 1990 was developed to realize these goals and was approved by the May 1982 plenum of the CPSU Central Committee. The program is an essential component of the economic strategy of the party in the next 10-year period.

The food problem, both in its agricultural and political aspects, is a central one of the current 10-year period. A guarantee of its successful solution is in the fulfillment and overfulfillment of the annual plans and of the full 11th Five-Year Plan for the accelerated development of the country's agricultural and industrial complex.

The party has set the goal of using the growing economic potential of the country to ensure the reliable supply to the population of all types of food in the shortest period possible and the substantive improvement in the structure of the diet of the Soviet people through the supply of more valuable foodstuffs.

As in the past, a decisive role in the supply of agricultural products will belong to the national farm production. In addition, the subsidiary farms are an important supplementary source for replenishing the food resources. It is difficult to overestimate the social and economic significance of the subsidiary farms. Indeed, the increase in livestock and poultry in this agrarian workshop on the one hand makes it possible to replenish the food reserves and to lower the outlay of food products from the state's resources; and on the other hand to carry out this production using inexpensive fodder, which is generally obtained from natural fodder grounds and land areas that are not conducive to cultivation. This is an exceptionally important circumstance. The basic standard for regulating the subsidiary farms is the decree of the CPSU Central Committee and the Council of Ministers "On Subsidiary Farms, Enterprises, Organizations, and Institutions".

The carrying out of the goals of the food program is everyone's responsibility and a high priority for all party, Soviet, and farm agencies; trade union and komsomol organizations; all kolkhoz and sovkhoz workers; other agricultural and industrial enterprises; and every Soviet individual. Communications also must make a definite contribution toward carrying out the food program.

Particular emphasis in the food program is given to the development of the private subsidiary farms of kolkhoz members, sovkhoz workers and workers in other sectors that are closely allied with work on rural lands, as well as the subsidiary farms of industrial enterprises. Rapid and dramatic results can be achieved through the increases in this form of agricultural production.

Communications workers, in fulfilling the goals specified in the food program as direct participants, are concentrating their efforts at accelerating the development of communications at the village level. Work is being done on producing more sophisticated equipment, constructing new village communication projects filled with modern equipment, and improving the services to the agricultural and individual complexes and the rural population.

The Collegium of the USSR Ministry of Communications has formulated and approved a plan for the fulfillment of party goals for the further improvement of communication systems that serve agricultural production. The plan includes measures for the accelerated development and improvement of the quality of the work of those radio broadcast, television, postal service, and distribution of printed matter enterprises that provide services to the rural population. The plan also emphasizes the growth of subsidiary farms associated with communications enterprises, the residential farms of communication workers living in rural areas, and garden farm cooperatives; the construction of mass culture projects; and the expansion of the available housing.

The plan for implementing the statutes of the food program was prepared on the basis of specific recommendations of structural subunits of the USSR Ministry of Communications that take into consideration production reserves, accumulated past experience, a critical attitude toward past and present negative phenomena within some enterprises in the sector, and the potential for successfully carrying out the decisions of the May 1982 plenum of the CPSU Central Committee.

The plan envisions, between 1982 and 1990, the construction and operation in rural areas of a public telephone network, a production enterprise intercommunication system and dispatcher telephone communications in kolkhoz, sovkhoz, and other agricultural enterprises and organizations having a total volume of 3.3 million subscribers, including 1.8 million subscribers between 1986 and 1990. This will permit production enterprise telephone intercommunications between all kolkhoz and sovkhoz by 1990 and between kolkhoz and sovkhoz of Siberia, the Far East, and the Kurgan Oblast in 1986.

The implementation of these goals will become feasible through the construction of a USSR unified automated communication system and a radio communications network as a result of the complex development of the public telephone system, the production enterprise intercommunications system, and the dispatcher telephone system.

An important place in the plan has been allotted to the improvement of television service to farmers and livestock breeders. Particular attention here is given to promising areas for farm production, which also have a satisfactory natural base for supporting the intensive development of livestock breeding. Incidentally, valuable experience in providing television service to livestock breeders has been gained by communication workers in the Kirghiz SSR.

The full plan calls for the provision of single-channel television service to 90% and dual-channel service to 60% of the families in rural areas.

This, of course, is no simple matter. It requires a search for new solutions and probably significant resources and labor outlays.

It is also planned that the level of broadcast services to the rural population will to a maximum extent approximate the level that is provided to the urban population. By 1990, the number of radio relay points in rural areas will reach 24.7 million, which will service 79% of the population. The daily scheduled operations of the broadcast relay centers will be increased; the introduction of three-channel broadcasts will be expanded.

The plan of the USSR Ministry of Communications provides for the distribution of sectoral periodicals to fully satisfy the needs of agricultural specialists, expansion of the retail circulation of printed matter using the rural communications departments (by 1990 all rural communications departments will be participating in the retail sales of periodicals); by 1985, 86% and by 1990 94% of populated rural points will receive deliveries of republic, kray, and oblast newspapers on the day issued. Planned measures for improving communications services to rural areas include the accelerated shift of delivery sections to the motorized delivery of mail; an increase in the number of mobile communications departments; changes in the operations schedule of rayon centers and rural departments to provide communications services to workers at more convenient times; and expansion of communication services to the home. Along with these measures, plans have been made for full telephone systems for all medical institutions and preschools, stores, and cultural and personal services and municipal enterprises, and for the construction of a radio communications network for emergency and first-aid medical treatment.

COPYRIGHT: Izdatel'stvo "Radio i svyaz'", 1983

7198

CSO: 5500/1013

MOSCOW DESCRIBES PHOTOTELEGRAPHY OF CENTRAL PRESS

LD160959 Moscow Maritime Service in Russian 0615 GMT 7 May 83

[Excerpts] This week, on 5 May, our country marked Press Day. Our country's journalists, and there are about 100,000 of them, are helped in their work by more than 6 million worker-correspondents and village correspondents. Nineteen years ago Leningrad was the first in the country to use a new progressive method for transmitting PRAVDA from Moscow by phototelegraphy. Now, the photographs of 15 Union newspapers are transmitted daily from the capital to the shores of the Neva via communications channels. Our correspondent, Antoliy Vyunik, reports from the Leningrad branch of the PRAVDA publishing house:

[Begin recording] It is here, in a small, light room in a five-story building at No 12 Khersonskaya Street, that PRAVDA and other central newspapers are received from Moscow via communications channels. I shall ask Aleksandra Vladimirovna Morozova, head of the reception center, how it is done.

[Morozova] Our reception center receives 15 central newspapers from Moscow. The transmissions are carried out in two sessions. During the first session we receive six newspapers which are for Leningrad Oblast and the northwestern part of our country.

[Question] What newspapers are these?

[Answer] They are SOVETSKAYA ROSSIYA, PRAVDA, IZVESTIYA, SELSKAYA ZHIZN, KRASNAYA ZVEZDA and SOTSIALISTICHESKAYA INDUSTRIYA. The remaining newspapers are received during the second transmission and are directly for the city of Leningrad.

[Question] What time does this take place?

[Answer] The first transmission starts at 1700 Moscow time, and the second at 2300 Moscow time. Our center's job is to receive these newspapers, process them chemically and pass the photocopies on directly to the printing house for further processing. The further processing is done by the zincography department at the printing house of the Leningrad branch of the PRAVDA publishing house, then the matrixes--the stereotypes--are made, and printing begins.

[Nyunik] And that is how PRAVDA and other central newspapers transmitted from Moscow by phototelegraphy are published here at No 12 Khersonskaya Street.
[End recording]

BRIEFS

KEMEROVO PAPER FACSIMILE STATION--Kemerovo [no date given]--Tomorrow's issue of SOVETSKAYA ROSSIYA will, in a manner of speaking, reach subscribers in the Kuzbass from space. A facsimile reception station [fotoprimyemnyy punkt] has started operation in Kemerovo. With the help of a space telegraph link it receives and records on photographic film the central newspapers SOVETSKAYA ROSSIYA, IZVESTIYA, SELSKAYA ZHIZN. Newspaper deliveries no longer depend on the vagaries of the weather and airplane flights. Kemerovo residents will receive the day's newspapers in the morning, while the inhabitants of most of the oblast's population centers will receive them on the day of publication. [By Yu. Yagunov]
[Text] [PM311621 Moscow SOVETSKAYA ROSSIYA in Russian 31 May 83 p 2]

TAJIK RADIO RELAY LINE--[Nonstaff correspondent V. Morozov report: "Rainbow on Screens"]--Leninabad (Tajik SSR), 8 May--With the commissioning of a radio relay line more than 100 km long the inhabitants of two more of the republic's rayons--Kanibadamsky and Isfarinskiy--will be able to watch central and republic television broadcasts in color. Moscow specialists and Leninabad construction workers were involved in constructing the line. The equipment was installed by workers of the local radio and television transmission center. The new radio relay bridge will also make it possible to improve automatic telephone communications between the oblast's major population centers.
[Text] [PM171415 Moscow PRAVDA in Russian 9 May 83 p 3]

CSO: 1800/1326

EUROPEAN METEOROLOGICAL SATELLITE PROGRAM

Paris AFP SCIENCES in French 24 Mar 83 pp 17-18

[Text] Paris--From official sources, it has been learned that, at the conclusion of 3 days of talks in Paris, 17 European countries have decided to create EUMETSAT [European Meteorological Satellite Organization], the official "birth certificate" of which will be signed during the second half of May.

The total expenditure on the EUMETSAT program, which is to be managed by the ESA [European Space Agency] over the next 2 years, will amount to 400 MECU [million European counting unit(s)], or 2.5 billion francs (1 ECU being worth 6.423 francs or \$0.977). Of this total, 380 MECU will be devoted to the implementation of the program itself; the rest is to be used for the creation of a secretariat of the organization, the staff of which will not exceed 10 persons. The location of the head office of this secretariat has not been decided yet.

The delegates meeting at the headquarters of the ESA agreed to finance 80 percent of the program: The building of the three satellites, purchase of the three Ariane-4 rockets to orbit them, and marketing of the data obtained through 1995.

Initial indications are that the cost of the launchers should hardly exceed 28 MECU each.

Approval on 23 May of the legal text of the agreement to set up the organization and financing of the program will be the culmination of an idea launched in 1970. It took over 6 years to attain final acceptance in 1977.

The first satellite under this program--a more highly efficient and reliable one, and capable of furnishing more accurate measurements, than the European METEOSATs presently in geostationary orbit over the Gulf of Guinea--is to be orbited by mid-1987, and the third one by the end of 1990. A fourth one, in kit form, may be added to the program as a backup for any unforeseen technical failure.

According to an ESA specialist, these new-model satellites will have a 10 percent longer useful life than the METEOSAT ones.

The financial participation of each of the member countries of EUMETSAT has been calculated on the basis of the expected industrial fallouts accruing to

each from the construction of the satellites, the share of each in the ESA's Ariane program, and the GNP [gross national product] of each.

Normally, the ESA's two METEOSAT satellites presently in operation should continue furnishing meteorological information until the end of 1985 or the beginning of 1986. To bridge the gap, the ESA experts are not excluding the possibility they may have to resort to use of the METEOSAT "flight prototype," which has been used for 11 years for ground tests of all kinds but that could nevertheless still be used to provide service.

EUMETSAT will thus succeed the system that now furnishes, every half-hour, photos of an exceptional quality and that is the sole means for forecasting meteorological system changes over the part of the globe extending, practically speaking, from the American coasts to the Horn of Africa, with a fair degree of accuracy. Its creation responds to the needs of all the European meteorological services--civilian and military--for whom these data are indispensable.

Austria, Greece, Turkey and Ireland have not yet been able to determine the extent to which they will participate in the financing of the program. These countries are to respond in this regard before 21 April.

The following countries have approved the text of the EUMETSAT agreement: FRG [Federal Republic of Germany], Austria, Belgium, Denmark, Spain, Finland, France, Greece, Ireland, Italy, Norway, Netherlands, Portugal, United Kingdom, Sweden, Switzerland and Turkey. Luxembourg and Yugoslavia were invited but did not send representatives.

9238

CSO: 5500/2662

EUROPEAN AFFAIRS

BRIEFS

ESA 'NAVSAT' STUDY--The European Space Agency (ESA) has just granted to the British company Racal, a feasibility study contract for Navsat, a new navigation system by satellite. Under the terms of the contract, Racal will study the impact of cost and performance of user equipment, as well as the possibility of combining the use of Navsat equipment with currently existing navigation receivers. Navsat is a navigation system by satellite, covering sea, air, and land applications. It appears to be an alternative for the American military system GPS Navstar. [Text] [Paris ELECTRONIQUE ACTUALITES in French 29 Apr 83 p 10] 11,023

FRANCE, UK ON TELECOM-1--The Satcom International GIE (Economic Interest Group) composed of Matra and British Aerospace, has proposed an improvement in the Telecom-1 satellite, so as to provide for the exportation of various products of the highest quality and performance in terms of weight and power. This new project is designated as TC-1-AR4 (Telecom-1-Ariane 4). For the experimental launching of Ariane 4, CNES (National Space Studies Center) and the General Directorate for Telecommunications (DGT), have proposed the launching of one of the first models in the Telecom-1 line, improved with an experimental payload of 4/6 GHz-20/30 GHz, with the first tests of switching matrixes. This launching was accepted in principle by the European Space Agency. The Telecom-1-Ariane 4 satellite appears to be an important technical stage, because a new platform will be tested and because the possibility of transmission at 20/30 GHz will be studied. This new program will be financed by industrialists and by the French and English ministries of industry for the development of the platform, by CNES and DGT for the equipment that will form the platform (recurrent models, integration, and so on), and by DGT for the payload which will be developed by Thomson-CSF. [Text] [Paris ELECTRONIQUE ACTUALITES in French 29 Apr 83 p 10] 11,023

CSO: 5500/2705

AUSTRIA

EXPANSION OF CABLE TV REQUIRES HUGE INVESTMENTS

Vienna DIE PRESSE in German 13 May 83 p 11

[Article by Franz C. Bauer: "Cable TV Costs Billions"]

[text] The installation of cable in Austria is proceeding briskly. Currently, about 220,000 citizens can receive at least two foreign programs via cable TV. Construction is going ahead busily in most large cities, in addition to Vienna, and in several rural regions.

The greatest worry so far for the network operators has been the hookup rate, which often lagged well behind the estimates. Detailed studies have now shown that the calculations were based on false assumptions. "It cannot be assumed that when cable is installed in a new area, all the households there are potential hookups," explains Hans J. Mendetter, marketing head for Telekabel Co. Ltd. Of 100 households, 10 are not occupied or almost unoccupied, about 20 percent do not have a permit for a television (almost all the "pirate" viewers who do not want to make their sets "legal" with a cable fall into this category), another 10 percent are exempt from fees and consequently are economically so weak that they cannot afford cable television. Ten percent of the households own only a black-and-white television set and show hardly any interest in the medium.

So about one-half of all households are left as potential cable TV recipients in the area to be served. "That means that we have been able to capture barely 50 percent of all paying television viewers in the area to be served," is Mendetter's view. The Telekabel people are not satisfied with that. "As a result of our advertising efforts, we have been able to achieve an annual growth in participants of 8 to 9 percent."

Considering the enormous expense for the required investment, this followup is very important. Installing cable in Austria is a billion-schilling project, which will create and maintain several hundred jobs in the next few years. "We always cooperate with the local electrical contractors," explains Siemens board chairman Vinzenz Huebl. Siemens is currently involved with companies in Baden, Linz, Wels, Steyr,

the city of Salzburg, St. Poelten and Voeckabruck. Of the 60,000 to 70,000 households in the area served, one-third has so far had itself hooked up. The cost for this was 220 million schillings, this year an additional 15 million schillings will be invested; this is to make another 9,000 hookups technically possible.

The undisputed market leader in the industry is the Philips subsidiary Telekabel, which so far has spent 800 million schillings for network expansion. Seven hundred million of this was spent in Vienna, another 150 million is to follow this year. By the end of 1982, 75,000 Austrians were Telekabel customers, at the end of 1983 it will probably be 100,000.

Particularly in Upper Austria there is a large number of small networks with a few dozen subscribers. "At the moment we have 115 members in the professional group, but only 29 of them supply more than 500 subscribers," reports Josef Geml, head of the cable operators of Upper Austria. The small companies, which were formed from community antenna projects to receive German programs, are suffering, according to his figures, mainly from acute financial shortfalls, which can only be solved within strict limits by increasing fees. The hookup fee varies between 2,000 and 7,000 schillings, the monthly fees costs from 90 to 150 schillings.

Nevertheless, the cable companies anticipate good business. "We expect that in 3 to 4 years we will be making a profit," reports Norbert Perle of the Innsbruck Cable Company. He is hoping to be able to expand the Innsbruck hookup quota from its current 20 percent (of all households) continuously in the next few years. Feeding in his own programs, in addition to FS 1, FS 2, ARD, ZDF, SRG and BR 3, could increase the attractiveness of the medium. The outcome of the dispute with the copy-right holders, who are unwilling to accept the fee of 3 schillings per participant awarded by an arbitration commission, is being tensely awaited.

9581

CSO: 5500/2707

NONALIGNED NEWS AGENCIES MEETING

NC011350 Nicosia Domestic Service in English 1100 GMT 1 Jun 83

[Text] The ninth meeting of the coordinating committee of the news agencies pool of the nonaligned countries opened in Nicosia today. In a message of greetings to the meeting, the President of the Republic, Mr Kiprianou, pointed out the advantages and benefits of the news agencies' pool and the way in which it can contribute to the struggle of the nonaligned countries. The president cited as an example the Cyprus problem stressing that, as we rely not on military strength but on the justice of our cause, enlightenment of world opinion is the main weapon in the fight against foreign occupation. He thanked the Nonaligned Movement for its unreserved and undivided support. President Kiprianou observed that even though the powerful international news agencies continue to dominate the world information scene their monopoly is no longer undisputed, and he added that Cyprus strongly supports the initiatives for the establishment of national, regional, and international communications media all over the Third World countries.

The meeting also heard a message from the director general of UNESCO, Mr M'bow, who extolled the significant role that the news agencies of the nonaligned can play in the international flow of information as well as their contribution to the establishment of a more equitable international information and communications order.

The meeting which was opened by the acting minister to the President, the Minister of Education Mr Katsellis, will last for 2 days. Taking part are about 20 countries as well as observers from various international organizations including the United Nations and UNESCO.

CSO: 5500/2720

COUNTRY'S FIRST LOCAL RADIO STATION INAUGURATED

Copenhagen BERLINGSKE TIDENDE in Danish 1 May 83 p 3

/Article by Jens Thomsen/

/Text/ Hvidovre Local Radio, as the first of Denmark's 50 local radio stations, will be breaking on Tuesday Danish Radio's monopoly of many years on radio broadcasting. The broadcasts will be able to be received throughout the greater Copenhagen area every Tuesday and Thursday from 5:05 to 5:35 pm at 103.7 MHz.

The station, which is located in the Strandmark Recreation Center on Enghave Street in Hvidovre, was given a starting grant of 50,000 kroner from the Hvidovre Cultural Council, while both the Hvidovre city government and the Ministry of Culture refused requests for economic aid.

The first half-hour broadcast on Tuesday will be broadcast from the "cafe-studio," where the station has invited a number of people to participate in a broadcast planned by the dialogue editorial staff, including the mayor of Hvidovre, Inger Larsen.

"We're calling ourselves a dialogue radio station," explained the local station's secretary, Erling Froth.

"Our goal is to counteract the loss of contact, the isolation people experience in the modern urban society."

Eight Programs

Besides news, the local station will occupy itself with conditions in the work-place in Hvidovre, sports and problems of interest for children and young people. According to Erling Groth, the station's staff of 60 active employees was picked out with both political orientations in mind, including people from both the Right and the Left. So far the different groups have worked together splendidly, with no problems.

Each of the eight programs has one person responsible for production. These eight broadcast directors are, in turn, part of a coordinating group for planning the programs.

Music programs will also be broadcast. Along with the other local Danish stations, Hvidovre Local Radio has made a special arrangement with Koda, according to which each station will pay 2,800 kroner annually for records.

TEXT TELEVISION TO START FOR HEARING IMPAIRED

Copenhagen BERLINGSKE TIDENDE in Danish 17 May 83 p 9

/Text/ "Danish Radio has finally gotten rid of the half-bad conscience it has been bothered by all these years, because of the hearing impaired," radio committee chairman Birte Weiss said yesterday as she presided at 2:00 pm at the first of Danish Radio's text-TV broadcasts.

Text-TV can be received during all of the regular TV broadcasting time, as well as when test patterns are being broadcast. Text-TV is first and foremost intended for Denmark's approximately 200,000 hearing impaired persons, who now will be able to see the latest news on their screens. At this moment 70 programs are being broadcast on text-TV. Ten of them are news programs; the rest include weather reports, stock reports and sports results.

In order to receive text-TV, the TV apparatus needs to be equipped with a decoder, which costs approximately 1,500 kroner.

At the moment only 30,000 homes are equipped to receive text-TV. But the radio authorities are assuming that that figure will be climbing sharply, now that Danish Radio has begun to broadcast text-TV. In Sweden, where they have had text-TV for 5 years, there are 200,000 text-TV receivers. This means that half of the hearing-impaired in Sweden are watching text-TV.

Text-TV can also be used to supply texts for entire broadcasts. At the moment, though, there is only capacity to supply text for 45 minutes per week.

Text-TV falls under jurisdiction of the TV-Magazine department. The editorial committee, under the leadership of Henning Schmaltz-Jorgensen, consists at the moment of the journalists Hans Henrik Landsvig and Thomas Christensen, as well as a secretary and a text technician.

9584

CSO: 5500/2710

POLITICAL, TECHNICAL DECISIONS AT ITU CONFERENCE IN NAIROBI

Paris TELECOMMUNICATIONS in French Jan 1983 pp 52-55

[Article by Michel Toutan and Jean-Louis Blanc: "Nairobi: The ITU in Transition:"]

[Excerpts] Opened in Nairobi on 27 September 1982 by Daniel Arap Moi, president of Kenya, the Conference of Plenipotentiaries of the International Telecommunications Union, which gathered together 1,100 delegates representing 147 countries, ended on 5 November 1982, after 6 weeks of work. The preceding conference took place in 1973 in Malaga Torremolinos (Spain); since then, important "tectonic" developments have taken place which did not fail to surface in Nairobi.

The politicization of the debates is linked to the political emergence and structuration of the developing countries --particularly in the "non-aligned" group--which bestows on the latter decisive clout in each of the UN institutions. From this point it constitutes a simple fact in all the conferences and meetings of the Union. Furthermore, the present political and economic circumstances accentuate the antagonism between north and south.

Like its predecessors, the Nairobi Conference made decisions of a political nature, elected the officials of the Union, and decided on its new structure. It also defined the role of technical cooperation, expenditure limits until the next conference of the same sort, as well as the dates for the other conferences and meetings of the Union.

Decisions of a Political Nature

Decisions of a political nature had to do with the states of Israel, South Africa, and the question of Namibia.

A proposed resolution, aimed at the condemnation and exclusion of Israel until this state conformed to its international obligations, was put forward in the first few days by a certain number of Arab or Islamic countries, joined by Cuba and Zimbabwe. A long debate on procedure began, at the end of which the resolution was adopted with an amendment (presented by several Western countries) maintaining only the condemnation of Israel and making provision, furthermore, for a grant from the ITU to the state of Lebanon, enabling it to reestablish the telecommunications equipment destroyed during the Israeli invasion of 1982.

The exclusion of South Africa from the conference and meetings of the Union, determined by the preceding Conferences of Plenipotentiaries, was reaffirmed.

Finally Namibia, represented by the UN Council for Namibia, was accepted by consensus as a member of the Union.

Elections

It is the responsibility of the Conference to elect the five members of the International Frequency Registration Committee (IFRB) and the members of the Administrative Council, in addition to the secretary general and the vice-secretary general of the Union.

Richard Butler, an Australian, the outgoing vice-secretary general, was elected secretary general to replace Mohamed Mili, a Tunisian. Jean Jipguep, a Cameroonian, was elected vice-secretary general.

Three of the five members of the IFRB were reelected. The two new elected members come from countries already represented on the IFRB.

The number of member countries of the Administrative Council was increased from 36 to 41. This expansion resulted in the better representation of the African, South American and Asian continents.

However, the majority of outgoing members were reelected and it may be noted that in Western Europe, France was reelected, obtaining the largest number of votes.

The permanent and essential role of the International Frequency Registration Committee (IFRB) lies in the systematic recording of the set frequencies determined by each state with a view to ensuring their official international recognition so as to avoid the interference which would prevent the establishment of any radio communications. The Committee also has the goal of carrying out, under the same conditions and with the same objective, the systematic recording of the orbits assigned by the countries to geostationary satellites. The IFRB is made up of five members elected by the Conference of Plenipotentiaries; the director is appointed from the former for one year, in rotation.

The Nairobi Conference concerned itself with modernizing the functioning of this organization and instructed the Council to seek out solutions. It made decisions with a view to computerizing the international administration of frequencies. It has also formulated a document concerning equitable access to geostationary satellite orbits which is distinctly more favorable to the LDCs [developing countries] than the preceding formulation.

Technical Cooperation

Henceforth, a distinction should be made between cooperation and technical assistance, according to the nature of the financing and of the action undertaken. As a matter of fact, in the area of telecommunications the ITU is the

implementing agent of the United Nations Development Program (UNDP). In future, operations such as missions by experts or purchases of equipment made in this context will come under technical cooperation. By contrast, operations initiated and financed by the ITU will be designated by the term "technical assistance." This was the decision of the Conference of Plenipotentiaries, broadening the goal of the Union so as to include explicitly the task of technical assistance on the basis of the ITU's own resources.

Furthermore, the special fund established in 1973 was replaced by a voluntary technical cooperation program.

Moreover, the Conference of Plenipotentiaries decided to strengthen the regional presence of the Union and to create an "international commission of telecommunications world-wide" responsible for the study of ways to promote the development of telecommunications in developing countries.

Moreover, the Conference of Plenipotentiaries retained the free choice of contribution category. The one-half to 30 unit categories were maintained and new categories were created: 35 and 40 unit categories, and a one-fourth and one-eighth category, the latter to be reserved for the least advanced countries or to small countries with a minimal gross national product, subject to the approval of the Administrative Council. As a result of the retention of the existing system, there will be an increase in the French contribution which, to give an idea, was Fr 16 million in 1982.

The cases of the different countries in arrears were examined. Special measures were enacted favoring the Central African Republic, Chad, Guatemala, and Mauritania whose debts will be transferred to a special interest free account.

Although the proposal to reduce the proposed Union budget by 20 percent--which would have caused problems for ICCs [International Consultation Committees] and the conferences--was rejected, the total of some chapters was nonetheless reduced by 10 percent.

The Conference decided to recognize the monetary unit of the International Monetary Fund, the SDR, equally with the goldbacked franc which alone is used at present for settling accounts between administrations.

Meeting and Conference Program

In the name of the French government, PTT [Posts and Telecommunications] minister Louis Mexandeau invited the next Conference of Plenipotentiaries, planned for 1989, to meet in France. Covering a period of 6 weeks, it will take place between January and April 1989.

The Conference adopted a program for the conferences and meetings projected through 1989. Among the many conferences planned, certain of them may be mentioned in view of what is at stake and their importance for the future of telecommunications. Among others may be noted the conference on decametric wave radio broadcasting, contributing to a new world order for data, as well as the conference dealing with the determination of orbits for geostationary satellites, programmed for two sessions, of which the first is to take place in 1985, and the second in 1988.

Various Questions

Until now, the ITU has been using five official languages: English, Chinese, French, Spanish and Russian. Three of these--English, Spanish, and French--are the working languages. The Nairobi Conference decided that Arabic, for which translation was only guaranteed at the time of the conferences, would henceforth be included among the official languages.

Moreover, the Conference debated once again the judicial nature--convention or constitution--of the basic instrument of the Union. Those in favor of greater stability wanted to adopt a constitution which would make any changes subject to the requirement of obtaining a qualified majority. However, the discussion came to nothing and the Conference entrusted the Administrative Council with conducting a study on the question.

In addition, the Conference of Plenipotentiaries adopted a resolution calling on all member countries of the Union to participate actively in 1983 in the International Year of Communications (IYC).

Finally, in the context of ITU relations with UNESCO, funds have been set aside to allow for ITU participation in the International Program for Communications Development (IPCD).

It seems important to recall to what degree the international situation just as much as the nature of the conference which took place in Nairobi condemned the latter to be political. Together, these two elements pointed forward to profound changes, touching the very nature of the Union.

The amendments made to the Convention were less significant than those that might have been expected. A number of decisions, aimed at calling into question in a more or less fundamental way the Union in the form which it has today, were thus deferred, and the Conference contented itself with leaving to the Administrative Council the task of undertaking studies with regard to the future of the Union.

Nevertheless, the line of demarcation between the countries of the north and those of the south has in a constant manner remained the most marked political division. France has endeavored to seek out compromise solutions, frequently appreciated, between certain violently antagonistic positions. Thus the decision announced by Louis Mexandeau, to invite the next Conference of Plenipotentiaries to France, was favorably received by the whole Conference.

9824

CSO: 5500/2691

FRANCE

CGE CHIEF WORRIED ABOUT DOMESTIC, WORLD INDUSTRIAL ALLIANCES

Paris LES ECHOS in French 26 May 83 pp 2-3

[Article by Jacques Jublin: "CGE: We Must Devote \$150 to 200 Million for the Telephone of the Future Alone"]

[Excerpts] What Happened to the 140 Billion That Had Been Promised?

"Quite simply," Georges Pebereau points out, "if CIT-Alcatel wants to be among the leaders by the year 2000, as it is now the 9th largest electronic company in the world and the 1st for digital telecommunications, we must be able to devote on the average 150 to 200 million dollars to prepare the future." As an indication of the effort to be made, the company's stakes at present are only 80 million dollars.

"This is a must if we are to retain our worldwide technological leadership," the general manager of CGE [expansion unknown] warns. Obviously with a hint to the government which has trouble materializing the top priority it has been giving to electronics in its industrial policy statements. But what happened to the 140 billion francs over 5 years that had been promised to this sector?

Part of that sum was dissipated in the steel, wood, paper and textile industries. Is it because the government has not yet managed to limit its interventions in branches where social factors outweigh economic prospects? This is the question asked, and rightly so, by our fellow newspaper the HERALD TRIBUNE in its supplement on the French economy.

The statement made by Georges Pebereau, a man of the field, sounds like a warning: "It is unthinkable that in one strategy or the other CGE and CIT-Alcatel should not exert full technological leadership. With full scientific, commercial and legal control over licensing agreements."

This is the way to be free; among other things free to sell telephone equipment to India or China without being subjected to reprimands from the United States which are closely watching over certain technology transfers that might be diverted from the civilian to the military. But, with IBM and the Japanese in mind, CGE wants to go ahead in electronic components, data communications and office automation. And it wants to conclude alliances for transmission equipment, even

for satellites. Georges Pebereau is positive: "A leading world group must be competitive in integrated circuits. Among other things."

Clear Boundaries With Thomson

In other words, rather than constantly fighting over what should become of CGCT [General Telephone Engineering Company], the former subsidiary of ITT that was nationalized at a cost of hundreds of millions (exactly 215), the ministries would do better to become aware of the international environment.

Of course, Georges Pebereau wishes to have clear boundaries with Alain Gomez and Thomson, a lifelong rival. "We must unite closely to approach foreign markets, as in China." But his main concern are the shadows cast by large world alliances in gestation.

ATT and Philips are about to conclude an explosive union that will go from telephone switchboards to transmission systems, through components. A general agreement is expected by the end of the month. The Japanese are flirting with Siemens; ITT is taking its bearings in the United States.

Pressure is rising on all sides, for all are thinking of the year 2000, of the new generations of equipment: the transmission of voice and images will then be made through light, through what experts are calling optoelectronics, to communicate with ever-increasing speed and intensity.

However, if pressure is rising, it is not identical on all groups. ITT, which was not too successful with its "all-electronic" telephone, has cause for concern. So has Siemens. And, no doubt, so has Philips. This is why Georges Pebereau is confident: "Time is working for us; we are not forced to negotiate. First of all, we must conquer markets with present technologies, which still have many good years ahead of them."

France With Cold Feet on the Sidelines

Louis Mexandeau appears to think along the same lines as the general manager of CGE. Only the day before yesterday, he told professionals of the telephone industry: "If selling on foreign markets means that we must conclude agreements with foreign partners, let's us do it (...). The game is worth the candle if material results are measured in terms of market."

Clearly, the minister of post and telecommunications would prefer industrial agreements with Italy or Spain which are in the process of modernizing their networks, rather than with Philips or ATT with which there is more to lose, commercially and technically. In terms of independence, of course.

Yet, Louis Mexandeau must follow his reasoning to the end. And France must be in a position to stake the billions of dollars that are required if she is to reap the fruit of a 15 years' conquest that started in the CNET (National Center for Telecommunications Studies) public laboratories in Lannion. Building technological leadership is an expensive process. It requires an atmosphere of serenity. It is impossible as long as France is torn between CGE and Thomson, with a poisoned dossier in the middle, that of CGCT, the former ITT

subsidiary that was nationalized and of which nobody knows what to do. Must duality, rivalry or competition lead to technological and economic confrontations?

The industry and the government must take stock of themselves. For France cannot afford to indulge in the subtle Byzantine games she likes all too much. Thomson and CGE will need huge amounts of money in the future (43 billion francs will have been invested by 1987 under its operating plan). Thus, CGE wants to become a leader in the fields of telecommunications, energy and transportation. Thomson would play an increased part in military and civilian electronics.

Politico-industrial psychodramas are exhausting the national economy and lead to its sclerosis. With one eye on IBM, the other on ATT, and its mind on the strength of the Japanese "clan," it is urgent for French society not to remain with cold feet on the sidelines of the world. A world that is about to do without it.

9294

CSO: 5500/2711

THOMSON GOAL: 30-40 PERCENT OF TELECOMMUNICATIONS MARKET

Paris ZERO UN INFORMATIQUE HEBDO in French 28 Feb 83 p 42

[Article by Eric Sorlet: "The Ambitions of the Thomson Group"]

[Text] As a result of the government decision of 3 November 1982, the development of videocommunication teledistribution and cable networks is becoming a major axis of Thomson's activity (see ZERO UN HEBDO No 737). Jacques Darmon, director of the communications branch, and Jacques Imbert, director of transmission activities and PDG [president and general director] of LTT [Telegraph and Telephone Lines], have stated that Thomson's ambitions are to capture 30-40 percent of the market.

Going beyond the council of ministers recent decision, the development of cable networks is motivated by new public demand, the political trend toward greater decentralization, and technical development with direct-television satellites in the future.

In France alone, the potential market for teledistribution equipment is estimated by the PTT [Postal and Telecommunications Administration] at Fr 45 billion, with 15 million homes that can eventually be hooked up to the system.

In Europe, the 8.5 million homes on cable at the end of 1982 will number more than 30 million by the end of 1987.

The Technological and Economic Value

Thomson has announced its desire to take a large share of this market and says it is ready to follow the cable program proposed by the PTT.

The PTT is planning for an order of 1.4 million hookups between 1983 and 1987 at a rate of a million homes a year beginning in 1987; centralized networks will be formed that will use optical technologies as much as possible.

The hookup of a million homes a year means a turnover of Fr 4 billion, which will be divided between installation (35 percent), cables (25 percent), multiple equipment (25 percent), and subscribers terminals (15 percent).

"Our objective is to get 30-40 percent of this turnover within the Thomson group," says Jacques Darmon, director of the communications branch.

In addition, the group also plans to become most experienced in installing the future service-integration digital networks (RNIS) that the PTT is considering eventually to construct.

Finally, the international impact of these achievements will hardly be negligible.

To meet these goals, Thomson intends to rely on the complementarity of its activities in technical and general-purpose electronics.

The whole group is involved.

The industrial and economic feasibility of these networks is largely dependent upon optical linkages.

In this area, the Fiber Optics Industry Co. (a common subsidiary of LTT/Thomson, Quartz and Silicon/St.-Gobain and Corning) is a key element, as are the specialized units of the components branch (Socapex connectors, electronic-optic components of the microwave components division) and the cable manufacturers (LTT and Cabeltel).

The actuation of a synergetic relationship between the various units of the group means that a special organization has had to be created.

Control and responsibility for the videocommunication cable networks have thus been assigned to the communications branch, which is directed by Jacques Darmon, and to his LTT subsidiary.

For this purpose, a specialized department has been set up under Jacques Imbert, the PDG of LTT, and Claude Etienne, the assistant general director. The department is headed by Rene Dattola, who is assisted by Maurice Maniere.

A Network for Lille

LTT has created first-generation technological materials that can now be installed; they range from the optical cable to the telescreen and include line equipment and video controls.

Planning and design of the first centralized fiber-optics network was recently assigned to LTT by the Lille Urban Community (CUDL).

This teledistribution network project is a projected market of about Fr 10 million and is financed by the CUDL, DGT [General Directorate of Telecommunications], TDF [Telediffusion de France], and LTT.

By the end of 1983, about 50 users in the Saint-Sauveur section of Lille will be hooked up.

The project may be further extended to 3,000 other homes and then to the whole urban community of more than 300,000 homes.

At the same time, LTT, in collaboration with SAT [Societe Anonyme de Telecommunications], is continuing to install the fiber-optic multiservice network in the city of Biarritz, and the first subscribers are supposed to be hooked up beginning in July 1983.

8782
CSO: 5500/2697

TELEPHONE EQUIPMENT, COMPONENTS CAUSE LARGE THOMSON-CSF DEFICIT

Paris LES ECHOS in French 4 May 83 p 18

[Text] Who is to be believed now? Last October, when it announced a consolidated loss of 555 million francs for the first half of the year, Thomson-CSF further stated that an improvement in results was not to be expected in the latter half of 1982, which could translate into an expected loss of 1.1 to 1.2 billion francs. These figures were repeated very seriously by stock specialists. As in a lottery, the numbers were right, but not in the right order. In reality, the consolidated loss will most likely amount to 2.15 billion francs, against 70.4 million in 1981, for a revenue of 27.2 billion francs, an increase of 9.5 percent.

The guilty parties in the decline in results can be named: the medical and telephone industries and, to a lesser degree, components. But this deteriorating situation did not develop in 1982; it goes back much further than that. In fact, the problems have been growing for several years, ever since CSF--prodged by governmental authorities--decided to embark on the great telephone adventure without being particularly prepared for it. In addition, there were the tribulations of the Compagnie Generale de Radiologie (CGR), sinking ever more deeply into debt. And, it must be admitted, a portion of revenues in the last few years came primarily from financial returns earned on advances on orders in the systems and detection sector, one that continues to grow.

For every change in leader, there is a change in management policy, one might say. Alain Gomez, who succeeds Jean-Pierre Bouyssonnie, has decided to dis-close--perhaps too bluntly, to some ways of thinking--the patient's true state of health: its condition is critical, because projected losses for 1982 absorb all reserves posted on the balance sheet, and perhaps a little more. Nominal capital will have to be dipped into, net assets at the end of 1981 being 2.6 billion francs, including company funds of 645 million.

For the parent company, the fiscal year closed with a loss of 1.93 billion francs, 793 million of which arose from unusual items. The current result stands at a loss of 1.14 billion francs (-1.29 billion from subsidiaries and a profit of 150 million in the parent company's traditional line of business).

A dividend payment to shareholders, suspended last year, is now indefinitely postponed, because all prognoses of recovery in 1983, foreseen by former managers primarily, are not being borne out. Indeed, convalescence promises

to be very long. With the same organization--that is, if CGR does not find a buyer--the Thomson-CSF group will not see the end of the tunnel until 1985 at the earliest. It wishes to remain in the telephone industry and will do whatever it can to make it a profitable activity. As for components, sizable capital expenditures have been undertaken and industrial policy charted.

The Parent Firm Is Doing Well

Thanks to a 26 percent increase in sales for a total of 9.4 billion francs, Thomson Brandt can announce an operating profit of 134 million francs; a definite drop from its 293 million in 1981, but a sizable profit nonetheless. Nevertheless, due to the creation of reserves--chiefly for the depreciation of subsidiary stock (CSF in particular)--the company will post a loss of 73 million francs and no dividend will be paid to shareholders. CSF's poor results will put consolidated accounts into the red for an expected loss of 2.2 billion francs.

Until recent years, CSF was considered the most lucrative member of the Thomson group, especially because its parent company (Thomson Brandt) ran into difficulties with its consumer products line. Now the roles are reversed.

12413

CSO: 5500/2698

THOMSON, PHILIPS SEEK ALLIANCE TO PRODUCE TV TUBES

Paris LE ECHOS in French 6 May 83 p 8

[Text] "An alliance between Thomson and Philips in television tube technology is still under discussion." In spite of the failed European alliance of Thomson, Grundig and Philips in home electronics, the door to negotiations between the nationalized French group and the firm in Eindhoven has not been closed. Industrial imperatives prevail: The Thomson-JVC agreement on video recorders does not preclude an all-European association in TV sets.

This is true because in a market that is globally depressed, truncated by slackened equipment prices, in which Japanese competition is severe, it is better to join forces to try to prime the pump at the sales level and to keep pace with technological changes.

La Radiotechnique, whose TV tubes (home and industrial) made in Dreux represented 50 percent of a 2.4 billion revenue in 1982, has spoken clearly in favor of a true alliance. But Thomson's reply is to wait until an agreement is reached concerning formats, particularly for the large tubes which it produces in 67 cm while they measure 66 cm in Eindhoven. Then and only then shall serious discussions begin on standards for future tubes, whether they be called high definition or not.

Even if the Japanese agreement on self-limitation signed with the EEC and some increase in prices afford a glimpse of better economic conditions, the heart of the debate remains the future of European industry in the business. Videocolor, a tube-manufacturing subsidiary of Thomson, lost 400 million francs in 1981 and had to close down its Ulm plant. But in fiscal year 1982, it was no longer in the red.

A Common Standard?

With great difficulty, La Radiotechnique regained its balance this year, after energetically restructuring, eliminating some jobs and reorienting its activities in a more professional direction, with printed circuits, in particular.

The adoption of a common standard would inevitably mean that Thomson, now under the license of the American firm RCA, would have to adapt its technology to make it compatible with Philip's, which would certainly be greatly appreciated by the firm in Eindhoven.

However, such a concession by the French group would entail large investments that could be made within the framework of an overall agreement between Thomson and Philips in the consumer product area, but this hardly seems necessary now that the agreement with JVC has been confirmed.

At stake here is a far-reaching issue, since a tube accounts for about 40 percent of the cost of a TV set. It is thus a vital component which must be mastered before all else. Consequently, the discussions between Philips and Thomson promise to be grueling and will not come to any real solution except on future generations of TV tubes.

12413

CSO: 5500/2698

THOMSON'S MT 25 INSTALLED IN CHILE; MORE EXPORTS TO IRAQ, ZAIRE

Paris ELECTRONIQUE ACTUALITES in French 6 May 83 pp 1, 10

[Article by D. Levy]

[Text] Santiago--The first MT 25 telephone exchange, built by Thomson-CSF, was installed on 26 April at Santiago, in Chile. This exchange is part of a contract of some 200 million francs obtained by Thomson-CSF at the end of 1980, to supply a network of 178,800 lines to the Chile Telephone Company (CTC).

The opening at Apoquindo (section of Santiago), which occurred at the same time as the delivery of the first three MT 25's ordered by the French PTT, and which follows the MT 20 installations at Amiens, Aubervilliers, Annecy, Athens, Baghdad, and Bogota, marks the end of the development of the MT 20/25 time-switching exchanges. But at the same time, until the end of the year, Thomson-CSF is beginning a phase of massive inauguration of MT exchanges in seven foreign countries, together with the delivery of 200,000-500,000 lines to our government.

Mission accomplished! Those can be the words of Thomson-CSF's public exchange division, which under the direction of Mr Guichet was entrusted with the development of the MT 20/25 time-switching exchanges. The first exchanges, in their various configurations (international transit centers at Athens, Amman, and Baghdad, national and international transit center at Bogota, and now, the Apoquindo subscriber center) have successfully passed all their on-site validation tests. The PTT certification which will definitely consecrate the operational nature of the product line, is expected toward the end of the year.

Criticized, denigrated, humiliated, Thomson-CSF was able to demonstrate once more the group's formidable technical (and financial) potential to solve problems associated with the development of a time-switching system of the MT 20/25 class. Delays? Much could be written about that; but let us simply note that the manufacturer can readily stand comparison with its competitors.

The Chile Network

Added to this is the group synergy used by Thomson-CSF through the various divisions and subsidiaries included in its communications branch. The contract obtained in Chile illustrates this global approach, which allows this manufacturer to deliver complete networks to the agencies or companies that provide telecommunication services in foreign countries.

The order covers a turnkey telecommunications network to be delivered to CTC and to spread over 23 locations. Adding up to 178,800 lines, this network must service Santiago (142,000 lines distributed into seven MT 25 exchanges, three MT 35 exchanges, and six remote URA's), Valparaiso (25,800 lines to one MT 25 exchange, and three MT 35 exchanges), and Concepcion (11,000 lines to a MT 25, and three remote URA's). In addition to these exchanges, the public exchange division will supply two centralized exploitation and maintenance centers (at Santiago and Valparaiso), and a card and power supply repair center, and also will synchronize the urban networks of Santiago and Valparaiso, optimize the Santiago urban network, and supervise maintenance for six months.

Transmission will be the responsibility of the radio-relay systems division, which will install two 34 Mbit digital radio-relay links, and of LTT (Telephone and Telegraph Lines), which will supply the multiplex equipment for the radio-relays, the PCM (pulse-code modulation) cable-pair transmission equipment, remote TNE-GAS assemblies in the three urban zones being covered, and a center for remote monitoring of PCM links at Santiago. Lastly, each of the three Thomson units involved will train the CTC personnel.

CTC, as explained to us by Mr Van de Wyngard, its director general, is the largest telephone company in Chile, with a current inventory of 398,000 lines out of a total of 450,000 lines; the remainder is operated by private companies, such as Coneteval (17,000 lines), Telcoy (3,000 lines), CTM, Cemet, and Sidcom. With its 6300 employees, among which are highly qualified technical personnel, CTC had the equivalent of 132 million dollars of operating receipts in 1982, and has the goal of expanding and modernizing its network to achieve the national objective of 14 telephone lines per 100 inhabitants (or one million lines by the end of 1990).

It is with this in mind that CTC has ordered the 178,800 MT lines from Thomson-CSF, whose program will stretch into mid-1984. But CTC is already studying a new expansion project of 170,000 additional lines, planned for 1985-1986. Moreover, CTC, which leases private exchanges to enterprises, has begun discussions with Thomson-CSF for the purchase of PABX. The good understanding that exists between the two companies to fulfill the current program, and the efficient support provided by Thomson-CSF-Chile, indicate a steady cooperation between the manufacturer and its customer.

15 Systems Installed Per Month

And now? Thomson-CSF is entering a phase of massive installations: in the coming months, the company will export MT 25 exchanges to Iraq, Chile, and Zaire, mixed MT 25 (subscriber-transit) exchanges to Lebanon, and international centers to Cotonou, Bamako, and Freetown. In France, after having turned over to PTT the first three MT 25's (Croix de Berny, Plaine, and Le Raincy), Thomson-CSF will deliver before the end of the year 200,000-500,000 MT 25 lines, to which will be added about twenty MT 20 transit centers. This is a formidable effort on the part of the company, which will turnover 15 installed systems per month (with peaks productions of 20 systems). By the end of 1984, it will thus have placed nearly 3 million (equivalent) lines in service.

That also implies an industrial production to match this installation rate. Thomson-CSF is categorical in this respect: "the MT line is now in its full industrial phase, and our plants are turning over more than 2 million lines per year."

Superimposed on this technical and industrial activity, is the commercial effort being made on an international scale. First of all, Thomson-CSF expects to benefit from its current achievements: discussions of expansions are being conducted in Lebanon, Iraq, Chile, and Jordan (three transit centers). The company has also responded to calls for bids in Algeria (one international center and 160,000 lines), Mauritania, and the Ivory Coast (transit centers). With its technical problems being solved, an industrial tool being converted to time-switching, and its commercial activities being reactivated, the credibility it had sought is now within reach. Thomson-CSF will be able to think seriously about future products. Since the development cost of this new product line is estimated at 1.5 billion (at the least), it is out of the question for this manufacturer to undertake the adventure alone. Will it then be a national or international cooperation?

11,023

CSO: 5500/2705

DATA PROCESSING CONSULTING FIRMS INVEST IN LATIN AMERICA

Paris L'USINE NOUVELLE in French 28 Apr 83 pp 73-75

[Article by Daniel Solano: "French SSCI Invest in Latin America"]

[Text] Direct exports, consortiums of firms, local branches... the French SSCI [data processing consulting firms] are taking advantage of the considerable need for services as a result of the developing data processing industry in Latin America. Their two advantages: installation of complete, turn-key data processing systems and software adapted to local needs.

In very few years, the French data processing consulting firms (SSCI) have gained a foothold in the Latin American market. Despite the economic difficulties currently faced by most of the countries in the region, these firms are increasing their operations.

Naturally, the SSCI's export activities are directed basically toward Europe, the United State' and Africa. French operations in Latin American countries are recent and frequently modest. But the data processing markets in this part of the world are going to be developing strongly in the coming years, and the French data processing firms are in a good position to take advantage of this expansion.

Latin America is now the most highly computerized region in the developing world. The large- and medium-sized computer industry represents more than \$3 billion, or practically as much as Africa, Asia and the Middle East combined. In terms of density, Latin America stands out even more, with a ratio of 15 computers per 1 million inhabitants, as compared to 5 in Africa (counting South Africa), 4 in the Middle East and 1 in Asia. Brazil alone accounts for half of the Latin American computer population, and is already eleventh in the world!

The development of hardware has led to a considerable need for data processing services: installation of complete, turn-key systems, preparation of software adapted to local needs, and the introduction of microcomputers in firms. The expansion of data processing opens a whole range of possibilities for governments, banks, insurance companies and

local firms. And despite economic difficulties, the growth is continuing. In Brazil, data processing is the only business sector that has increased its sales in the past 2 years. "In a recessionary market, it is vital for Brazilian industrialists to control costs and increase their competitiveness," Claude-Yves Munchenbach, director of Cisinformatica, the Brazilian subsidiary of Cisi, explains.

For the French SSCI, there are two major opportunities to exploit: first, the traditional accounting system (pay slips, stock management, etc.), with, in Brazil, a local variant, i.e., the periodic re-evaluation of the accounts to erase the country's chronic inflationary effect (99.7 percent in 1982); and, secondly, construction of turn-key systems, accompanied by specific software.

The approach used depends to a great extent on the market chosen. Thus, some SSCI's operate basically through direct exports. This is the case with Sodeteg-TAI, the SSCI of the Thomson group, which has been working in Latin America since 1969, either as part of a consortium of firms (e.g., construction of centralized control posts for several subway lines in Mexico City, Caracas, Santiago and Rio de Janeiro), or on the basis of contracts won by the company through open bidding, such as installation of Electrobras' national dispatching system (the Brazilian EdF [French Electric Company]), a system based on the use of six large computers, the software for which represents 3 years of work. "Over the past 5 years, Latin America has been our primary exports market," Francis Barroux, commercial director of Sodeteg-TAI, points out. At Sema-Informatique, direct sales are relayed through a subsidiary in Brazil. Among the contracts obtained in this country, we can list the Acominas steel company, the Porto Alegre subway, and orders from subsidiaries of French companies.

Technical Know-How and Experience in Organization and Management

Although other SSCI's have worked on a more limited scale, their results are not negligible. For instance, under a contract obtained by Matra to set up a videotext experiment in Sao Paulo, Steria sold complete systems. Syseca, a specialist in air control software, participated as a Thomson subsidiary in setting up the air cover for Brazil, the Sligos-PLS signed technical software sales contracts for data processing technicians with local firms in Venezuela and Chile.

Other SSCI's have decided to have local branches. For most of them, the first contact occurred basically as a result of opportunity. For example, the start of the Brazilian subsidiary of Telesystems was the result of the Brazilian government's nationalization policy. In the early seventies, in fact, Brazil had a monopoly over international telecommunications. France Cables et Radio, the parent company of Telesystems, decided to set up a data processing firm in Recife in 1973. "We found ourselves with available funds and Brazilian personnel. We wanted to start an operation in a promising field," Jean-Yves Berard, deputy manager director of Telesystemes, explained. Opportunity was also at the origin of the construction of CCMC and SG2 [General Service and Management Company] in Argentina and Eurosoft in Brazil.

Once the initial stage was over, the SSCI's adopted a strategy of playing the local cards to the hilt. "We wanted to transfer our technical know-how as well as our experience in organization and management," Joel-Marie Baur, director of the CCMC subsidiaries, explained.

Generally Qualified Data Processing Personnel

For Eurosoft, setting up a company in another country is part of the group's general policy. "Our strategy is based on setting up subsidiaries in countries where we operate," Jean G. Auriscoste, chief executive officer of Eurosoft, indicated. To effectively conduct business in Brazil, however, association with a local majority-shareholder partner is practically obligatory. Thus most French SSCI's are in partnership with Brazilians, but maintain responsibility for management. SG2 bought shares in an existing service company with the intent of developing it. Cisi holds 47 percent of the capital of Cisinformatica, the majority of which belongs to the Valbras group (of which CCF is a member).

Working in a Latin American country entails constraints that the current crisis is intensifying. Nearly all the countries have exchange control systems, and in Brazil, repatriation of profits is strictly regulated. In Argentina, where several SSCI's are located, inflation is the highest in the world, and the exchange rate has gone from 2,000 pesos per dollar in January 1981 to 60,000 in March 1983 (at the official rate). Moreover, the economic situation fluctuates. "The economic cycles can turn around rapidly, and one has to be able to adapt," Claude Fighiera, the SG2 director for South America, explained.

To cope with these difficulties, the SSCI's can count on certain trump cards. The investment needed to set up a subsidiary is in fact not very large in the data processing sector, especially since this investment is made in association with local partners. Moreover, countries such as Brazil and Argentina have data processing personnel (technicians and engineers) who are generally qualified, which is not true of other developing countries.

Gaining the Latest Technology

The results point to a positive balance sheet. The oldest company, Telesystemes do Brazil, has, in addition to its initial base in Recife, offices in Rio de Janeiro and Sao Paulo. Despite the economic crunch, sales have grown rapidly: the revenue went from 11 to 14 million francs between 1981 and 1982, and it should reach to more than 17 million francs this year. A number of SSCI's expect to increase their operations in Latin America. For instance, CCMC hopes to set up a subsidiary in Mexico in 1984, a country where French SSCI's have done little in spite of the long-term potential of this market. Eurosoft has designed an ambitious Latin American strategy. The goal is to establish two subsidiaries in 1983, one in Argentina, to cover the Southern Cone countries, and another in Colombia, to cover the Andean Pact countries (a local version of the Common Market, comprising five countries). SG2, with a good position in Latin America, is exploring possibilities in Venezuela, Colombia and Chile.

BRIEFS

MT-20 IN COLOMBIA--On 26 November 1982 the broadcast "channel" of the MT-20 international central in Bogota, Colombia was hooked up to the Colombian network. The international input circuits had been operational for several months. The MT-20 in Bogota is thus the second international retransmission center to become completely operational; the first one was in Athens. Colombia is very interested in French telecommunications technology. Mr Belisario Betaneur, the president of the Colombian republic, personally visited a demonstration of French products sponsored by Intelmatique. [Text] [Paris TELECOMMUNICATIONS in French Jan 1983 pp 14-15] 8782

E 10 B, MT-20 IN JORDAN--The Cit-Alcatel company has installed an E 10 B national retransmission exchange in Amman. The installation was ordered in May 1982 to meet the urgent needs of national automatic traffic flow. The automatic switching device was delivered, installed, tested and formally received in less than six months. Two weeks later, on 1 December 1982, an MT-20 retransmission exchange built by Thomson-CSF [General Radio Company] went into service in Amman. On 2 December, Mr al-Zaben, the Jordanian minister of Communications, commented on the clear connection during a telephone conversation with Louis Mexandeau, the French minister of the Postal and Telecommunications Administration. The Jordanian minister emphasized the efficiency of the work done by the French suppliers and expressed enthusiasm about Franco-Jordanian cooperation in the area of telecommunications. To equip Jordan's northern network, the local administration has ordered 50,000 more subscriber lines from the French consortium headed by Cit-Alcatel (Lyons Cables, TRT [Telephone and Radio Telecommunications]), which brings up to 140,000 the total number of lines that Jordan has ordered from French industry. [Text] [Paris TELECOMMUNICATIONS in French Jan 1983 p 15] 8782

TRT CONTRACTS IN AFRICA--TRT [Telephone and Radio Telecommunications] was recently awarded two contracts in Africa: the firm will supply Fr 11 million worth of radio links to Benin and install a Fr 1-million rural telephone system in the Congo. The PTT's Benin contract involves renovating several radio links, especially the Benin part of the Lagos-Cotonou-Lome international axis, revamping the Cotonou-Lakossa-Bohicon link, and constructing the Natitingou-Porga axis in order to extend the network towards Upper Volta (an ECOWAS project). These TRT linkages use 7-gigahertz, new-generation hertzian beams. They will have transmission capacities of 300-960 telephone lines with one emergency channel (1 + 1 configuration). In the Congo, an IRT 1500 integrated digital system will link

the Gombe agricultural high school and the WHO services to the Brazzaville telephone exchange. It may be remembered that TRT recently struck a deal for a turnkey telecommunications, transmission and broadcasting network in the southwestern part of the country; the Congo had already contracted for TRT's IRT 1500 rural telephone system to serve certain sparsely populated zones in the regions of Mossendjo and Pointe Noire. [Text] [Paris ELECTRONIQUE ACTUALITES in French 15 Apr 83 p 12] 8782

POSSIBLE ALCATEL CONTRACT WITH CHINA--In a recent visit to France, Mrs Mu Hua, the Chinese minister of Economic Relations, discussed with our Foreign Commerce minister and PTT [Postal and Telecommunications Administration] minister the possibility of building a telephone equipment factory in China (the project would be done by CIT-Alcatel) as well as a hertzian-beam transmission network (in which Thomson would be involved). However, it appears that these projects, which some estimate to cost Fr 8 billion, have not gotten out of the talking stage. The question of a factory for telephone exchanges in China is the subject of discussions between Chinese officials and three contractors: ITT [International Telephone & Telegraph], which was first in line (in 1980) and which is benefiting from a Belgian loan because its Belgian subsidiary BTM [expansion unknown] has an interest in the deal; the Japanese company Nippon Electric, which has given a telephone exchange to a Chinese province; and CIT-Alcatel. Mr Pebereau, general director of CGE [General Electric Company], proposed during a visit to China last February that a transfer of technology take place on the Indian model. At the conclusion of his visit, a memorandum of agreement was signed, but the CGE emphasizes that there is "nothing concrete" yet. But it is also known that the PTT is also "fighting" with Treasury to obtain a finance loan for China. [Text] [Paris ELECTRONIQUE ACTUALITES in French 22 Apr 83 p 10] 8782

LTT CONTRACTS WITH CAMEROON, MEXICO--LTT [Telephone & Telegraph Lines] recently obtained a contract for Fr 80 million to construct an urban telephone network in Cameroon and has completed an optical-fiber transmission link in Mexico. The Cameroon contract involves building an urban telephone cable network in Douala and Yaounde. This new contract comes in addition to one previously concluded (September 1979) at a value of about Fr 55 million; the new contract includes line-construction and hookup and will add 12,000 additional lines to the existing network. The link built by LTT in Mexico is an installation in the Tuba thermoelectric plant (transformers and high-tension pylons). The cable is made up of grooved cylindrical elements enclosing 10 optical fibers. To complete the link, Thomson supplied the cables, the optical-electronic and multiplex equipment rated at 34 megabytes per second, and the splicing and measuring equipment. This is a first in fiber optics for a European contractor in Mexico. Several foreign countries, e.g. Greece, Iraq and the FRG have already worked with Thomson in the area of optical transmission. It should be noted that LTT had a turnover of Fr 1.27 billion in 1982 and that 49 percent of its orders were for export. Thomson's transmission work generally has achieved a turnover of Fr 2.724 billion, 30 percent of which was for export. [Text] [Paris ELECTRONIQUE ACTUALITES in French 22 Apr 83 p 10] 8782

SAT CABLES FOR ALGERIA--Upon completion of an international consultation, the Algerian PTT [Postal, Telephone & Telecommunications Service] recently notified the SAT [Telecommunications Corporation] of four contracts for 910 kilometers of 14-quad composite cable with four 1.2/4.4 coaxial pairs and balloon insulation. The cables are intended for the following routes: El-Asnam-Tenes, Constantine-Batna-Biskra, Hassi R'Mel-Hassi Messaoud, Resyane-Arsew, and Annaba-Tunisian border. The latter link is an extension of an important artery and has been awarded to the SAT by the Tunisian PTT; it links Tunis with the Algerian border and Gabes with the Libyan border, with a shunt to Djerba. The SAT has thus been given responsibility for an international hookup of more than 1,600 kilometers between 3 important Maghreb countries: Algeria, Tunisia and Libya. The financing is being done largely by the Arab Economic and Social Development Fund (FADES); it totals more than Fr 90 million, a large portion of which is intended for the purchase of SAT cables. [Text] [Paris ELECTRONIQUE ACTUALITES in French 22 Apr 83 p 10] 8782

CGE SEEKS FOREIGN PARTNER--CGE wishes to conclude an alliance with a foreign telecommunications group, declared its director general, Mr Pebereau, on 25 April. "If we do not achieve this alliance in the next six months, CGE will de facto remain an outsider," he added. This coalition could be made with one of the large companies in the field (ITT, NEC, Siemens, Northern, or Ericsson). On the other hand, a possibility still remains to participate in the coalition of ATT and Philips, announced last September, Mr Pebereau stated. To remain competitive and to perfect the next generation of telephone exchanges, the director general of CGE estimated financing needs of 150-200 million dollars per year; "which we are not capable of meeting," he added. However, this alliance with a foreign group does not automatically mean a break in the company's cooperation with Thomson. "We will compete in France but will be allied to conquer foreign markets, with Thomson also being able to choose a foreign partner." [Text] [Paris ELECTRONIQUE ACTUALITES in French 29 Apr 83 p 9] 11,023

THOMSON EARTH STATION IN PERU--The Peruvian National Social Communications Institute (INSC) has just signed a 112-million franc contract with Thomson-CSF. Besides a satellite receiving earth station, transmitting two television studios and two VHF broadcasting stations of 5 and 20 kW, the order involves 140 television transmitting-receiving stations and 40 TVRO (television receiving only) stations. The latter, equipped with 7 meter antenna, can be supplied with a large number of options depending on the broadcasting frequency of the telecommunications satellite and local needs (one to six programs retransmitted on low power). [Text] [Paris L'USINE NOUVELLE in French 5 May 83 p 95] 9805

TRT CONTRACT IN MOROCCO--Telecommunications Radioelectricite Telephone (TRT) has just begun operating a large microwave broadcast network designed to carry the programs of the second TV channel to the cities of Casablanca, Rabat, Meknes, Fez, Oujda and Marrakesh. In addition, Radio-Television of Morocco has just awarded TRT a contract to install a new broadcast system between the cities of Casablanca, Rabat, Tangiers, Fez and Oujda. More than 40 transmitters/receivers will carry the international broadcasts of the Mediterranean Games to be held in Morocco. [Text] [Paris LES ECHOS in French 3 May 83 p 8] 12413

BANK FIRST TO CONNECT SPITSBERGEN, MAINLAND VIA SATELLITE

Oslo AFTENPOSTEN in Norwegian 31 May 83 p 30

[Article by Lars Ditlev Hansen]

[Text] Longyearby May--Bank services via satellite have become a fact in Norway now that the Svalbard Savings Bank is tied into Fellesdata's data center via Intelsat 4B. In less than four seconds the bank account of Svalbard customers can be brought up-to-date. They can obtain with a quarter of a second's delay the same services through the data center as customers on the mainland. This is taking place at a time when the inhabitants of Spitsbergen continue to receive TV programs one week after they have been shown in Norway.

According to what John Arild Eriksen, the information chief in Fellesdata, knows, there is only one other bank in the world, connected with the main bank's data center via satellite. Otherwise, a large number of worldwide companies use satellite communications in their business.

Georg Hermansen, president of the Svalbard Savings Bank, informs AFTENPOSTEN that the connection to the data center via satellite costs the bank about 25,000 kroner a month, but it is nevertheless a distinct advantage for the bank. Previously it could take several days for a salary deposit in Spitsbergen to be registered on the mainland so that monies could be paid out there.

The office summaries which were needed in Spitsbergen had to be sent on microfilm by air, and it would take one to two weeks for the banks to have the up-to-date summaries. The present connection also opens up the possibilities for mini-banks for the inhabitants.

The connection is via telephone line which is held open for the time the bank needs it. The data signals go from Spitsbergen to the satellite which is stationed over the Indian Ocean. The signals are sent from the satellite to the mountain station at Jaeren which forwards them to Fellesdata installation.

The bank has two teller terminals and a screen terminal connected to an Ericsson D5 minicomputer. When the Svalbard Savings Bank started this up in

October last year, it was the first data link via satellite on Spitsbergen. Now the Store Norske Spitsbergen Coal Company has followed suit with an installation from Norsk Data. The Telegraph Company on Spitsbergen says that SAS is about to become a customer for such a connection. Today, however, there is a problem in regard to capacity for several big users of data links.

There are namely only 28 channels from Spitsbergen to the mainland, and they must also serve the ordinary telephone conversations. But the Telegraph Company has indicated that it hopes to have increased capacity for data links within a year.

6893

CSO: 5500/2708

RECENT HISTORY, STRATEGY OF ERICSSON INFORMATION SYSTEMS

Paris ZERO UN INFORMATIQUE HEBDO in French 7 Mar 83 p 48

[Article by Eric Lundberg]

[Text] After acquiring Datasab and annexing Facit, Ericsson Information Systems is emerging as one of the major European computer groups (in particular, see 01 HEBDO No 719 of 18 July 1982, and the study of its product line in 01 HEBDO No 724 of 22 November 1982). The 01 HEBDO correspondent in Stockholm, Eric Lundberg, reviews the recent history of the company as seen in Scandinavia.

The end of the 1960's proved to be difficult for the large Swedish group LM Ericsson. The telephone switchboards used by the public were making way for electronic equipment, but the technology path that had been adopted did not appear to be the best one. The competitors, such as Siemens, ITT, and so on, had also taken the wrong turn.

The Swedish firm was the first to find the right direction by placing its telephone switchboards under computer control.

The commercial success of the Axe system is well known: for instance, Saudi Arabian orders for Axe systems, produced partly by Ericsson in collaboration with Philips, will probably exceed 30 billion francs.

This order, as well as more than one hundred Axe installations in Mexico, France, and other countries, has given the Swedish group a strong financial impetus.

A New Orientation

The LM Ericsson customers have traditionally been official agencies such as national defense departments and the PTT's of various countries. But the future was obviously becoming the private market of telematics, office automation, and information processing.

The LM Ericsson company thus changed its outlook in 1981, first of all by changing its logo: the name Ericsson alone, followed by a very stylized E. This was probably the easiest of the directors' decision in the early 1980's!

More substantial was the decision that the group would address itself not only to its traditional customers, but also to the hundreds of thousands, if not millions, of potential customers in the private sector of international information processing.

In order to successfully address groups of customers which it had not addressed before, on 1 January 1982 the company created Ericsson Information Systems AB.

Earlier, the group had acquired 90.5 percent of the capital of Datasaab, with 9.5 percent being bought by the Swedish PTT through its subsidiary Teleinvest. Two divisions of the Ericsson group, automatic switches and information systems, were attached to various Datasaab divisions, notably Business Systems, banking systems, and Alfaskop.

This grouping was thus the basis of Ericsson Information Systems, with a turnover of about 3 billion francs and some 3900 employees.

By comparison, the turnover of the whole Ericsson group slightly exceeded 16 billion francs with an order book of 20 billion, and with more than 70,000 employees throughout the world.

Specialties

The Datasaab company had suffered several bad years before being bought by Ericsson. In 1980, for instance, the company's net loss was of the order of 170 million francs. The transaction was to be paid by Ericsson at the rate of 100 million per year for 1982, 1983, and 1984.

Each of the divisions introduced by Ericsson and Datasaab had its own specialized area:

Information systems includes private networks, modems, and office automation;

Telephone switchboards includes PBX's, telephones, and terminals (in the Ericsson language, a telephone is called a terminal);

Business Systems offers management computers and terminals;

Banking systems encompasses medium power computers, and terminal systems specific to banks;

Alfaskop is a proprietary system of terminals, of which almost 10,000 units have been installed.

America First

EIS, an acronym for Ericsson Information Systems, thus starts out with many areas of competence in transmission systems as well as in software and programs for designing, evaluating, and processing data, texts, images, or voice.

In the near future, the world market demand for micro and minicomputers, terminals with screen displays, and other electronic equipment for office automation, was to increase by more than 20 percent per year.

Added to these machines were automatic switches and other equipment for local networks.

This market, a private one, was to grow from about 85 billion francs in 1980, to about 275 billion in 1985.

One-half of these large figures were generated in the United States, which thus became a very large market for EIS.

The formation of a new sales organization in America began with the Ericsson acquisition of the powerful American company Anaconda.

A Policy of Acquisitions

The strategy of EIS was carefully formulated to obtain the widest range of skills.

The partial or complete purchase of companies, Swedish or foreign, with specific areas of competence, will accelerate the expansion and depth of specializations offered by EIS to its international customers.

A typical example is the concern for compatibility between Alfaskop and IBM computers.

The boundaries between the parent company--the Ericsson group--and the EIS subsidiary are becoming increasingly vague, while the technologies, products, software, and sales channels are becoming the same.

On 1 January 1983, Ericsson bought the Facit group, which had until then belonged to the well known company Electrolux, for an amount that has not yet been divulged, but that probably fell between 400 and 500 million francs.

Facit's History

This acquisition was performed by Ericsson rather than EIS; before it can be integrated into EIS, a large number of activities must be coordinated.

But what does Facit represent?

The so-called Facit illness or crisis, which in fact at the time affected most office equipment manufacturers throughout the world, was due to the difficult transition from electromechanical technology to electronics.

Electrolux, a large Swedish conglomerate, bought Facit in 1972 for 60 million francs. After three years in the red, Facit achieved positive results beginning in 1976, and in 1980, 1981, and 1982, had consolidated profits of 80 to 100 million francs per year.

The 1982 turnover reached 1.7 billion francs with 5000 employees. Facit has some 20 subsidiaries throughout the world, and agents or distributors in about 80 countries. In addition to its unquestionable technical competence, it is Facit's global sales and maintenance network that has attracted Ericsson.

Facit works on four groups of products:

Business Systems (about 650 million francs in turnover per year), involving computers and mechanical, electric, and electronic typewriters manufactured among other places in Svangsta (Sweden) and Brazil;

Peripheral products (370 million francs annual turnover), dedicated to terminals, printers, and office automation stations;

Calculators (280 million francs), essentially table models with printers;

Furniture (150 million francs) manufactured in Sweden and Singapore;

Spare parts and services (250 million francs).

When Ericsson Information Systems will have bought Facit from its parent company, EIS will become a very large group with a turnover of over 5 billion francs.

The goal is to triple this figure in the 1980's. Obviously, the EIS group which was formed only recently, will encounter some growing pains.

But EIS will also undoubtedly very rapidly appear as a strong force on the international information processing markets in the broadest sense of the word.

11,023

CSO: 5500/2700

SWEDEN

ALMOST ALL POLITICAL PARTIES BACK SATELLITE, CABLE TV

Stockholm SVENSKA DAGBLADET in Swedish 24 May 83 p 6

[Article by Leif Dahlgren: "Communists Only Opponent to Satellite and Cable TV--Attitude of Politicians Positive"]

[Text] The new media are welcome. That is the political attitude of the Riksdag parties. There is no political opposition to speak of. Only VPK [Communist Left Party] is opposed to new innovations such as satellite TV and cable TV.

Pay TV, compact disc, large-picture TV, video disc, parabolic antennas, video tax...

SVENSKA DAGBLADET has reported on this flood of new media devices which are on the way into Swedish homes. The devices are welcome. The political attitude is positive.

The Social Democrats say that basically they have a positive attitude toward the new media. The party is going to accept cable TV as well as satellite transmissions. The nonsocialist parties are positive in the same way toward the new media. The difference between the two political groups has to do with advertising in the media.

The following is a summary of how the Riksdag parties view the most imminent media developments:

Liberal Party:

The Liberal Party says YES to the new technical media and the possibilities these give to develop free choice and free speech.

The party says YES to experimental transmissions with cable TV, preferably in cooperation with local newspapers in the area.

The party says YES to the present organization of the four companies of Sveriges Radio--national radio, local radio, educational radio and TV--and wants them in the future to be "in the service of the public."

The Liberal Party says YES to the question of testing advertising on TV with reference to coming satellite TV, which will have advertising input. The party would also allow advertising on Swedish TV, between programs and maximized at a few minutes per hour. In such case the income will be divided between radio, TV and the daily press.

Conservative Party:

The Conservatives want to break the Swedish radio and TV monopoly. They believe that increased competition and ad financing will give better programs and greater choice. The Conservatives say:

YES to advertising on TV, in blocks of at most 5 minutes per hour when programs are not interrupted other than in exceptional cases.

NO to continued license increases.

YES to cable TV, with freedom of establishment. Press, people's movements, sports organizations and individual businesses should be able to transmit on cable TV to the public, as Sveriges TV does.

YES to satellite TV. Under no circumstances will the Conservatives have barriers to satellite transmissions, regardless of whether they contain advertising or not.

NO to tax and fees on video, but YES to measures which interfere with speculative violence.

YES to continued short-distance radio.

YES to increased resources to the Radio Commission so that it can better determine whether Sveriges Radio programs are complying with radio laws and agreements.

Communist Left Party:

The Communist Left Party considers that community preparedness for the fast technological changes is catastrophically low. Community interest and social needs seldom or never come to the foreground, says the party, when new communications techniques or information systems are developed.

VPK says NO to current video developments with violence, disdain for women, etc.

Definite NO to advertising on TV. VPK believes that advertising on TV not only influences program content, but also threatens the independence of Sveriges Radio.

NO says VPK also to cable TV. But if it does come, the cultural-political considerations must be included.

It also says NO to short-distance radio, which VPK calls a monstrosity in the ether. VPK says it is influenced by commercial interests, and constitutes the voice of strong organizations.

YES, on the other hand, to public radio: a good alternative for the individual to show his possibilities.

YES says VPK to a combined Sveriges Radio with increased resources. VPK sees Sveriges Radio as our most important medium of cultural dissemination today.

Center Party:

The Center Party wants to retain radio and TV in the service of the people. The Center Party believes that the rapid technical development has changed many of the assumptions for mass media policy which were well-established before, but that certain goals remain undisturbed.

Center says YES to a cable TV network, but wants Sveriges TV program always obligatory at night, both on the two current channels and on pay TV, which the Center Party believes will be a reality in a few years. The Center Party is pressing hard for the cable TV net to include the entire country.

Center says YES to satellite TV. Direct transmitting satellites with advertising will come in 1986. Center does not believe in the possibility of "screening out" the advertising from a satellite which is distributed via cable TV.

Center sees the "advertising ban as obsolete," according to the party's spokesman for mass media questions, Sven-Erik Nordin. However, that does not mean that Sveriges TV must introduce advertising blocks in its program channels, according to the Center Party.

Social Democratic Party:

The Social Democrats want to keep a radio and TV service for the public, where the requirement for truth, nonpartisanship and balance is carried out in the program offerings, and where programs for target groups will be guaranteed.

The Social Democrats consider that they have a fundamentally positive attitude toward the new media.

The Social Democrats say YES to cable TV, for a cheaper way to distribute Swedish and foreign radio and TV programs, and to send locally produced programs. But it is considered urgent to draw up regulations for who will operate a TV network.

The Social Democrats say YES to satellite TV, which they believe that they neither should nor could interfere with.

On the other hand the party says NO to advertising on radio and TV. An important reason is the fear that the daily press will be hit by large advertising losses and that the unique number of newspapers in Sweden would disappear.

The Social Democrats believe that it is obvious that freedom of expression will also be part of the new media. But at the same time it is considered urgent that there be variety and multiplicity in the total mass media offering. Otherwise, says the party and the government, freedom of expression is an empty formality and freedom of information for the public will be strongly limited.

9287

CSO: 5500/2713

SWEDEN

STATE TELEVISION COMPANY DIRECTORS FAVOR THIRD CHANNEL

Stockholm SVENSKA DAGBLADET in Swedish 24 May 83 p 6

[Article by Thomas Jonasson: "Sveriges TV Directors Are For New Channel"]

[Text] Shall we have a new TV channel in 1985? That is what a majority of the directors of Sveriges TV think. With the help of pay TV they want to bring in a new channel for Swedish TV viewers.

Soon it will be 2 years since TV chief Sam Nilsson presented the idea of pay TV for the first time. Opposition was then firm from the politicians, but now it has softened.

In 1985 Sveriges TV will begin the third channel on which the viewers, for an extra cost, will be able to see attractive programs outside the ordinary channels 1 and 2.

At the end of the summer the TV company will bring forth a recommendation for pay TV in its appropriation request. Pay TV presupposes a political decision which may be made in the Riksdag next spring.

In one and one-half years the TV company hopes to be able to start with experimental transmissions. The areas concerned are Stockholm and transmissions to Horby, Sundsvall and Alvsbyn.

To get pay TV the viewer will have to buy a small electronic box which changes coded TV signals to correct TV pictures. The box is going to cost about 1,000 kronor.

Furthermore there will be a subscriber fee of between 60 and 80 kronor per month.

The Conservatives will block the new channel if the monopoly Sveriges TV is to control pay TV. Also Minister of Culture Bengt Goransson has so far been cool to the idea. As yet, nothing is definite on the future of pay TV in this country.

9287

CSO: 5500/2713

SWEDEN

BRIEFS

NEW PHONE, DATA COMMUNICATIONS LINK--In order to handle the growing telephone and data traffic the Telecommunications Administration is shortly going to begin a large expansion with digital radio connections. The connections in each radio link are going to replace 1,920 telephone channels. The links will be built in the large cities. In the first step a new expansion is planned of the links Stockholm-Nykoping-Norrkoping-Jonkoping-Goteborg-Malmo, plus the stretches Goteborg-Tanum, Stockholm-Agesta and Sundsvall-Umea-Skelleftea-Lulea. Since there is no company in Sweden which makes the equipment which will be needed, the Telecommunications Administration has asked the government to bring it in duty-free from Japan, which in competition with several other countries has proved to be the best supplier. The equipment is estimated to cost a total of 50 million kronor. [Text] [Stockholm DAGENS NYHETER in Swedish 29 May 83 p 8] 9287

CSO: 5500/2713

END